Cross-border spatial planning in world society

a systems-theoretical perspective

Joren Jacobs



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a systems-theoretical perspective

Proefschrift

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Voorwoord

Zestien jaar geleden kwam ik als promovendus in dienst van de Radboud Universiteit. Het lijkt een eeuwigheid geleden, een stukje van een vorig leven. Vier jaar later en het promotieonderzoek en de dissertatie waren nog niet klaar, maar mijn contract bij de universiteit liep wel af. Met mijn toenmalige partner en onze tweejarige dochter verhuisde ik naar Amersfoort om het bedrijf van mijn ouders over te nemen. Een totaal andere carrière lag in het verschiet, maar in al mijn naïviteit dacht ik de promotie nog wel te kunnen afronden in de vrije uurtjes. Er volgde een turbulente periode van elf jaar ondernemerschap en een scheiding. Met uitzondering van een mooie publicatie in het tijdschrift Planning Theory, bleek het erg lastig om in deze situatie academische output te generen. Een tijdje was ik zoekende, ook letterlijk (naar een woning), maar langzaam begon er rust en helderheid te ontstaan. Ik besloot afscheid te nemen van het ondernemerschap en stortte mij nog eenmaal op dit onafgeronde project. Het boek dat u voor zich heeft is daarvan het resultaat.

In dit korte voorwoord wil ik reflecteren op de totstandkoming van dit boek en mijn vorming als wetenschapper, die daaraan ten grondslag ligt. Hopelijk kan ik daarmee duiden waarom dit boek zo is als het is, een bespreking van het bijna uitgestorven beleidsterrein 'grensoverschrijdende ruimtelijke planning' door middel van uitwerkingen van Niklas Luhmanns systeemtheorie met betrekking tot noties als 'de grens', 'de regio', 'de maatschappij' en 'planning', veelal op theoretisch niveau. Laat ik daarom beginnen bij de 'kiem' van mijn wetenschappelijke loopbaan, de laatste jaren van mijn studie in Wageningen.

Nadat ons in de Bachelor-opleiding 'Landschap, planning en ontwerp' allerhande technische kennis en vaardigheden met betrekking tot de ruimtelijke inrichting van Nederland was overgedragen, overheerste bij mij een zekere scepsis. Wat betreft mijn specialisatie, ruimtelijke planning, meende ik toch dat het krachtenveld in de echte wereld minder bepaald

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werd vanuit technische planningskennis als wel vanuit politieke en economische belangen. Veeleer bepalen deze belangen welke technische kennis wél en welke technische kennis níet mee mag doen. Daarbij wordt de facto de werkelijkheid geconstrueerd. Deze sociale (in de zin van 'maatschappelijke') kant van ruimtelijke planning interesseerde me in feite meer dan het opdoen van de competenties waarmee je zelf 'ruimtelijk planner' zou kunnen worden. Hoewel ik dat toen nog niet zo had kunnen benoemen, neigde ik dus naar de tweede orde observatie, de blik van de buitenstaander. Gelukkig was er in de Master-fase van mijn opleiding volop ruimte om daar dieper in te duiken, ondersteund door een aantal jonge docenten, die graag kritisch onderwijs voor getergde zielen verzorgden. Daarbij wil ik Raoul Beunen, Martijn Duineveld en Kristof Van Assche noemen en roemen. Destijds als docenten, later als collega's in de wetenschap, inspireerden zij me om mijn eigen koers te varen en de sociaal-constructivistische perspectieven te onderzoeken.

Tegen de tijd dat mijn studie erop zat, had ik me al ondergedompeld in de (wetenschaps-) filosofie, de kennistheorie (epistemologie), wist ik van Foucaults archeologische benadering en diens theorie over macht, vond ik het concept 'discours' heel normaal, was ik geïntrigeerd door prille noties van Luhmanns systeemtheorie en had ik redelijk ontwikkelde ideeën over wat sociale wetenschap zou kunnen of moeten zijn. Op onze reis naar de indianenreservaten in Noord-Amerika, samen met Henk-Jan Kooij, breidde ik mijn toen nog beperkte bibliotheek geweldig uit met prachtige, engelstalige boeken, die zich uitstrekten over al deze terreinen, daarbij geholpen door de commentaren en duidingen van Kristof, die ter plaatse onze afstudeerbegeleider was. Aan het eind van de Masteropleiding was ik een kritische planningonderzoeker geworden.

Al snel diende zich een kans aan om mijn wetenschappelijke ambities waar te maken toen er eind 2008 een vacature verscheen voor twee promovendi in het project 'Grensoverschrijdende Gebiedsontwikkeling' bij de vakgroep Sociale Geografie aan de Radboud Universiteit. Het project was

geschreven door Martin van der Velde en Henk van Houtum en werd mede-gefinancierd door Nicis, nu Platform31, en de grensgemeenten Nijmegen, Hengelo, Maastricht en Heerlen. In het voorstel werd beschreven hoe de landsgrens, mogelijk ten onrechte, werd gezien als 'einde plangebied'. Door grensoverschrijdend naar de ruimtelijke inrichting te kijken, zou er meer potentie voor ontwikkeling ontstaan, meer creativiteit en innovatie. De grens als onbenut potentiëel. Aan dit 'scheppen rondom de grens' werd de term 'borderscape' gegeven. Als kritische planningonderzoeker intrigeerde mij deze gedachtengangen en ik solliciteerde succesvol op een van de twee posities. Mijn fijne collega, Mariska van der Giessen, richtte zich binnen dit project op de Europese subsidies voor de grensregio's en ik richtte mij op het regionale krachtenspel van organisaties die zich met de ruimtelijke ontwikkeling van het grensgebied bezig hielden.

In eerste instantie werd ik bewogen door affiniteit met het idee van een andere planning, met het idee van 'borderscaping'. Kritisch onderzoek zou er dan ook op gericht zijn om te laten zien waarom de betrokken organisaties vast zitten in hun beperkte zienswijzen en hoe zij die zouden doorbreken. Naarmate mijn onderzoekingen vorderden en ik mij tegelijkertijd steeds meer thuis ging voelen in de sociologische theoriën van Niklas Luhmann, Bruno Latour en Stephan Fuchs - om de belangrijkste te noemen - was dit uitgangspunt voor mij niet langer houdbaar. Zoals Fuchs het schreef, "[a] science cares for itself, not some social cause" ("wetenschap is geïnteresseerd in zichzelf, niet in een of ander maatschappelijk doel"). Dat neemt niet weg dat een onderzoeker gedreven kan worden door maatschappelijke idealen of gevoelens van recht en onrecht, maar inherent aan de self-referentialiteit van wetenschap is dat hij of zij uiteindelijk heeft te reageren op en zich te verhouden tot het wetenschappelijke discours. Niet de vraag "wat is goed?" is hierbij leidend, maar de vraag "wat is waar?" Als gevolg van dit academische vormingsproces zou ik mijzelf dan ook niet langer een kritisch planningonderzoeker noemen,

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iemand die bij voorbaat maatschappijkritiek wil leveren alsof hij zelf buiten de maatschappij zou staan. Ik werd daarentegen een onderzoeker die de distantie van de tweede orde observatie betrachtte, om vanuit die positie een diepgaand begrip te krijgen van hoe de maatschappij werkt, steeds vanuit theoretische inspiratiebronnen en met behulp van (door-) ontwikkeling van sociologische theorie.

Ik weet het, dit klinkt niet spannend, niet geëngageerd genoeg misschien, en het zou wellicht vragen doen rijzen als "wat is dan de maatschappelijke relevantie van dit onderzoek?" De realiteit is dat er veel wetenschappelijke vakgebieden zijn waarin het engagement juist wel voorop staat, waarin het doel is om kritisch te zijn (richting bestaande maatschappelijke verhoudingen) en waarin men wil bijdragen aan een betere wereld. Ik wil niets afdoen aan deze drijfveren, maar ik heb bezwaar tegen een consequentie die dit zou kunnen hebben, namelijk dat het onderscheid goed/slecht of rechtvaardig/ onrechtvaardig leidend wordt in wetenschappelijk onderzoek in plaats van het onderscheid waar/ niet waar, waardoor de theorieontwikkeling in moddersporen verzand raakt. Het onderscheid goed/slecht is immers onderdeel van de moraliteit, een terrein dat eenieder vrij staat te betreden maar dat niet kan worden geclaimd door wetenschappers die bepalen wat 'objectief goed' of 'objectief slecht' is, hoewel de politiek dat vaak wel van de wetenschap lijkt te vragen. Waar wetenschappers dit wel doen, zal het onderscheid tussen wetenschap en moraliteit vervagen en betekenisloos worden. Onderzoeksinstituten worden dan politieke organisaties. In mijn maatschappijbeeld past een onpartijdige wetenschap, die geïnteresseerd is in de vraag hoe de sociale werkelijkheid tot stand komt en gereproduceerd wordt en streeft naar de ontwikkeling van de juiste theoretische concepten die dat kunnen vatten. Ik voel me een beetje ouderwets als ik dit schrijf, maar dan weet u in elk geval waarom dit boek zo is als het is.

Woord van dank

Dat dit boek er gekomen is, heb ik voor een groot deel te danken aan morele steun uit academische en familiaire kringen. Bijzonder erkentelijk ben ik Willemyn, die meermaals moest meemaken dat ik ploeterde en het manuscript vervolgens weer onafgerond terzijde schoof. Zij heeft er ondanks dat altijd in geloofd dat ik het af zou maken. Ook mijn begeleiders aan de Radboud Universiteit, Martin en Henk, hebben de hoop nooit opgegeven en mij gedurende de afgelopen jaren kritisch en constructief van feedback voorzien. In de eerste plaats dank ik hen voor de kans om dit onderzoek te mogen doen, omdat ze zo dapper waren mij aan te nemen, en in de tweede plaats voor hun begrip en geduld. Hoewel de kritische commentaren soms tot radeloosheid mijnerzijds leidde, is een eerste versie van het manuscript in 2021 daardoor wel dusdanig herzien dat ik nu echt trots kan zijn op het eindresultaat. Bovenal ben ik mijn promotor Huib Ernste dankbaar voor zijn onaflatende steun, overredingskracht en motiverende gestes, die mij hebben doen beseffen hoe dicht ik bij de afronding was en hoe mooi het zou zijn om die afronding daadwerkelijk te kunnen vieren.

Maar het is ook goed om nog verder terug te kijken. De jaren dat ik feitelijk aan de universiteit actief was, van 2009 tot 2013, vormen een bijzonder waardevolle herinnering. Dit waren de jaren van het veldwerk, waarin ik dikwijls optrok met geweldige collega's als Henk-Jan Kooij en Krisztina Varró, maar ook de jaren van academische reflectie in allerhande verbanden. Naast Henk-Jan en Krisztina moeten Daan Boezeman, Bas Hendrikx, Joris Schapendonk, Ruben Gielis, Stefan Dormans, Bianca Szytniewski, Marlies Meijer, Marieke Oteman en Arnoud Lagendijk genoemd worden, waarmee het altiid prettig was om over het academische werk te spreken en vaak ook de diepte in te duiken door diverse (sociologische) theoriën te bespreken -en om illegaal zelf-gezette koffie te drinken natuurlijk. In dat kader denk ik met vreugde en dankbaarheid terug aan die keer dat Henk-Jan, Daan en ik de Alexander von Humboldt-lezingen

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mochten organiseren, een jaarlijks evenement dat door Huib Ernste in het leven was geroepen en indertijd vaste traditie was geworden. Dit gaf ons de mogelijkheid om gerenommeerde buitenlandse academici te ontmoeten en met hen in gesprek te gaan. Terugkijkend naar mijn universiteitsjaren, wil ik toch in het bijzonder Henk-Jan en Daan danken, voor de roemruchte Peer-Appel-sessies (een factultatieve variant van 'peer to peer') die wij, soms buiten werktijd, onderhielden en waarin wij elkaars werk en ideeën besproken, en voor hun vriendschap.

Ik weet zeker dat er mensen zijn die ik vergeten ben hier te noemen. Mijn welgemeende excuses daarvoor! Zo waren er ook nog vele gastonderzoekers, die een paar weken of maanden bij ons verbleven en waarmee het altijd leuk was om uit te wisselen. In het algemeen kijk ik met veel plezier terug naar mijn tijd in Nijmegen met alle mensen van het team van GaP, later GPM. Daarom past een dank aan jullie allemaal. Tot slot wil ik ook Ariadne bedanken voor haar steun en vertrouwen in de afronde fase van dit project. Het kunnen delen van mijn proces maakte dat ik me veel minder eenzaam hoefde te voelen.

Joren Jacobs Amersfoort, december 2024

Preface

Sixteen years ago, I started working as a PhD researcher at Radboud University. It seems like ages ago, pieces of a former life. My research and dissertation weren't yet finished when my employment at the university ended. My erstwhile partner and I decided to move to Amersfoort, with our two year old daughter, to settle for another life, taking a share in my parents' business and, later, taking over the whole business. In all my naievity, I thought I could finish my PhD project by working on it in spare time. This turned out to become a turbulent, eleven year, period of entrepeneurship, and a divorce. With the exception of a proud publication in the journal Planning Theory, it proved to be a very difficult time for generating academic output. For a while, I was searching - also literally, searching for a house - but slowly some peace and clarity began to emerge. I decided to quit my business and focus, one more time, on the unfinished PhD project. The book, you have in front of you, is the result of this.

In this short preface, I would like to reflect on this book's realization and how I came to be an academic researcher, which is where it is all based upon. Hopefully, this enables me to clarify why this book is what it is, an analysis of the almost extinct policy field of 'cross-border spatial planning' by means of an elaboration of Niklas Luhmann's theory of self-referential social systems with regard to notions like 'the border', 'the region', 'society', and 'planning', largely on a theoretical level. In order to do so, let me go back to the inception of my academic career, during the final years of my studies in Wageningen.

After finishing a Bachelor in 'Landscape, architecture and planning', in which various technical skills and knowledge on the spatial development of the Netherlands was transferred upon us, my personal feeling was that of a degree of scepticism. With regard to my specialization, spatial planning, I felt that actual spatial development in the world was less a result of technical planning skills and knowledge and more of power

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relations, politics, and money. To be sure, such interests, it seemed to me, decided which technical knowledge was to be held as relevant and which technical knowledge was to be left out of the game. In this process, reality is de facto constructed. The social (in the sense of 'societal') dimension of spatial planning interested me more than gaining the necessary competencies required to become a 'spatial planner'. I wouldn't have been able to express it in those terms, but I certainly tended to second-order observation, the perspective of the outsider. To my great fortune, during my Master studies, there was ample opportunity to dive deeper into this world, thanks to a number of young teachers, who happily offered critical education to restless souls. In this regard, I would like to mention Raoul Beunen, Martijn Duineveld, and Kristof Van Assche, with gratitude. At the time as teachers, later as colleagues in academia, these illustrious guys inspired me to follow my own course and explore perspectives in social constructivism.

When I finished my studies, I had already immersed myself in philosophy (of science), theories of knowledge (epistemology), had become familiar with Foucault's archeology and his concept of power, considered the concept of 'discourse' quite normal, had become intrigued by early notions of Luhmannian systems theory, and had developed some pretty clear ideas on what social science could or should be. On our trip to the American-Indian reservations, with Henk-Jan Kooij, I greatly expanded my modest library, buying wonderful, english books, stretching across all these areas, aided by suggestions and comments by Kristof, who was the local supervisor of our Master thesis. At this point in time, I had become a critical planning researcher.

Soon, an opportunity arose for me to follow my academic ambitions, when in 2008 Radboud University offered two PhD positions at the department of Human Geography. The research project was called 'Cross-Border Spatial Development' and was created by Martin van der Velde and Henk van Houtum, co-financed by Nicis, now Platform31,

and the border municipalities of Nijmegen, Hengelo, Maastricht, and Heerlen. The project's description outlined how the national border, perhaps unjustly so, was considered the 'end of planning territory'. By taking up a cross-border perspective, new potential for development would become visible, there could be more room for creativity and innovation. The national border as hitherto unseen potential. This process of 'shaping' around the border was designated by the term 'borderscape'. Considering myself a critical planning researcher, I was intrigued by these ideas, and successfully applied for the job. Within this project, my fine colleague, Mariska van der Giessen, focused on the European grants for the border regions and I focused on the regional interplay of forces of organizations involved in the spatial development of the border region.

At first, affinity with the idea of alternative planning approaches, in the guise of 'borderscaping', was what motivated me. A critical research would aim to show why and how involved planning organizations were stuck in limited (bordered) perspectives, and in what way they could break free. As my research progressed, however, and as a I became more and more at home with the sociological theories of Niklas Luhmann, Bruno Latour, and Stephan Fuchs - to name the most important figures - this axiom was no longer tenable. As Fuchs writes, "[a] science cares for itself, not some social cause." This doesn't exclude the possibility that a researcher is driven by societial ideals or feelings of justice or injustice but, inherent to the self-referentiality of science, in the end, he er she will have to respond and relate to the scientific discourse. The leading question, then, is not "what is good?" but "what is true?" As a result of these shifts in my scientific attitude, I stopped considering myself a critical planning researcher, that is to say, as someone who, from the outset, wants to deliver societal criticism, as if he were positioned outside of society. On the contrary, I became a researcher motivated by second-order observation, i.e. a more distanced perspective, trying to gain a thorough

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understanding of how society works, always from the background of theoretical sources of inspiration and by means of further elaboration of sociological theory.

I know, this might not sound very entizing, perhaps not sufficiently engaged, and it could beg the question: "what is the societal relevance of this research?" In practice, there are a lot of scientific disciplines in which societal engagement is the norm, in which the aim is to be critical (of existing societal relations), and in which one vows to contribute to a better world. I surely do not aspire to disqualify such motivations. However, I do object against a possible consequence, namely that the distinction of good/bad or of just/unjust takes the lead in scientific inquiry rather than the distinction of true/false, thereby muddying the waters of scientific theory development. To be sure, I consider the distinction good/bad the binary code of morality, not of science, and morality I consider a terrain accessible to everyone, not to be dominated by scientists who supposedly know what is 'objectively good' or 'objectively bad' - despite politicians sometimes seeming to demand exactly this from science. But whenever science tries to do so, this will dillute the difference between science and morality and make it meaningless. Research institutions may become political organizations. My worldview is that of an unbiased science, interested in the question how social reality emerges and is reproduced, aiming for the development of theories and theoretical concepts that manage to capture these processes. Writing this, I feel a little oldfashioned, but then at least you know why this book is the way it is.

Acknowledgements

The fact of this book is, in large part, thanks to moral support from academic and familiar circles. Exceptional gratitude I owe to Willemyn, who had to endure repeated episodes which had me muddling through some version of a manuscript and then laying it, unfinished, to the side again. Despite of these experiences, she kept believing in my ability to finish it, someday. Similarly, my co-supervisors at Radboud

University, Martin and Henk, also have never given up on me, and have, far beyond the 'expiration date', provided me with critical and constructive comments in view of my dissertation. Therefore, I want, first of all, to thank them for their bravery in giving me the job and, secondly, I wholeheartedly thank them for their patience and understanding. Admittedly, the criticism sometimes made me feel desperate. However, a draft manuscript I submitted in 2021 benefited greatly from revisions I undertook as a result of it. I definitely feel more proud of my work now. By and large, I am thankful to my supervisor Huib Ernste for his unwavering support, power of persuasion, and motivating gestures, which made realize how close I was to wrapping it up, and how wonderful and gratifying it would be to finally celebrate this moment.

Looking back a little further in time, to the years I was in fact working at the university (from 2009 to 2013), I maintain precious memories. These were the years of fieldwork, in which I often teamed up with wonderful colleagues like Henk-Jan Kooij and Krisztina Varró, but they were also the vears of academic reflection in various contstellations. Beside Henk-Jan and Krisztina, I should mention Daan Boezeman, Bas Hendrikx, Joris Schapendonk, Ruben Gielis, Stefan Dormans, Bianca Szytniewski, Marlies Meijer, Marieke Oteman, and Arnoud Lagendijk. It was always a pleasure to discuss work and dive deep into (sociological) theory - I remember the various so-called 'turns' in geography - and of course I also enjoyed having an illegaly brewed cup of coffee together. With great pleasure, I think back to that time Henk-Jan, Daan, and I had the honour of organizing the Alexander von Humboldt lectures, an annual event conceived by Huib following his inauguration at Radboud University, which by that time had become established tradition. The lecture series gave us the opportunity to meet reputed academics from around the world and have interesting conversations with them. Revisiting these university years, I realize I want to thank especially Henk-Jan and Daan. I thank them for the infamous 'pear to apple' sessions (an informal version of 'peer

Acknowledgements

to peer' dealings), which we entertained, often outside working hours, to discuss each other's work, and I thank them for their friendship.

Evidently, I must have forgotten some people. For this, I offer my sincere apologies. It has been a long and winding road. For example, there were often guest scholars, visiting our department for some weeks or month. It has always been a pleasure to get to know each other and exchange ideas. In general, I look back to my time in Nijmegen with great pleasure, to all members of what was then 'GaP' and, later, 'GPE'. Therefore, I would like to thank you all. Finally, I must express my gratitude to Ariadne for supporting and trusting in me during the final stages of this project. Being able to share the ups and downs of this process, made me feel a lot less lonely.

Joren Jacobs Amersfoort, December 2024

CHAPTER 1 Introduction

"... planning cannot determine the state in which the system will end up as a result of planning. Planning, when it takes place, is accordingly an element of evolution, for even the observation of models and the good intentions of planners put the system on an unforeseen course."

Niklas Luhmann, Introduction to Systems Theory¹

¹ Luhmann, 2012.

1.1 What is cross-border spatial planning?

A state border marks the place where one jurisdiction is exchanged for another. In many such locations, the pattern of spatial development differs from that of central places. This is, of course, a result of particular historical conditions manifested, for example, in language differences. In the context of the Dutch border, there have been times where fences, gates, and customs checks played a role but at least since the Schengen Treaty, borders are largely no longer physical barriers, and the border area has become an accessable yet unique type of landscape, appreciated by local citizens for its qualities as a place of roughness, naturalness, negligence, non-development, and quietness.² Conditions that hamper cross-border spatial development seem to have remained in place.

Nevertheless, now that the border in principle may be crossed freely, the border landscape as a place of non-development is under threat, by spatial planning! For some, it has become a disturbance that a journey across the border is not smooth; roads end, train services are infrequent, if at all, and there is complicated switching between various systems of payment for your public transport. There are other problems; many border areas suffer from population and economic decline, both of which reinforce each other. Young people seek their fortunes not across the border but in the central places of their own country. The border can be a cause of negative development. Spatial planning enthusiasts find in this situation plenty of reason to take measures, not least in the spatial-economic structure of the borderlands.

The exemplary case of what is sketched above is the Dutch border, especially where it meets the German territory. Even though along many stretches of this border there is a considerable degree of urbanization, one observes striking spatial patterns; a lack of cross-border infrastructure and

² Eker & Van Houtum (eds.), 2013.

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mobility and even population decline in border areas suggest a border zone that has the lights switched off. Over and above the recurring peripherality discourse, public authorities have, in actuality, made various efforts at cross-border integration attempting to overcome obstacles posed by state borders, such as legal differences, a lack of awareness, and cultural differences.³ A particular example is presented by the numerous attempts to achieve this by means of a form of cross-border spatial planning, explicitly aimed at the transformation of cross-border space and the ways in which this space is used by citizens.⁴ In what follows I will focus on the Dutch-German case to elaborate a clearer idea of what can be understood by the controversial -because officially non-existent—phenomenon of cross-border spatial planning. By doing so, it is possible to highlight examples of planning projects and institutions with their links and historical contexts, rather than in isolation.

1.1.1 Definition and examples

Planning is making plans, spatial planning is making spatial plans, and cross-border spatial planning is the making of spatial plans that include, cross, and transcend borders. This simple yet broad definition⁵ of the research topic at hand points to myriad examples of maps and schemes that appear to be results of such processes. Cross-border spatial planning, with varying degrees of complexity, is a phenomenon which appears for at least the last 70 years, and is endeavored by various kinds of organizations, including governments, university departments, design/consultancy firms, and all kinds of hybrids of these.

- ³ Evers et al., 1999; Knippenberg, 2004.
- ⁴ Vonk, 2001; Hoogerbrugge, 1999.
- ⁵ For a concise definition of cross-border spatial planning, see Durand & Decoville, 2017.

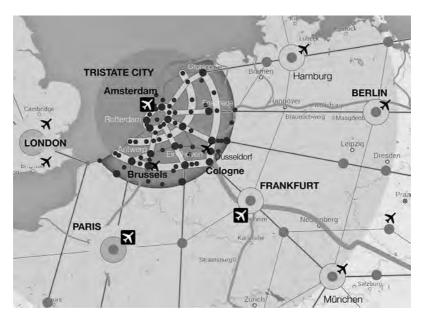


Figure 1 Tristate City, it's larger than our borders.

Consider, for example, a 2017 plan, which is still being promoted at the time of writing, by a group of Dutch institutional investors and associated actors. It presents the Netherlands plus parts of Belgium and Germany as a single 'city network' named Tristate City⁶. Its rationale is that Dutch cities are too small to compete in what the project organization calls the 'battle of the cities', in which mega cities compete for investment and talent. By treating the Netherlands as an urbanized delta with 18 million inhabitants, and by including major cities across its borders in Belgium and Germany, the project's supporters say that they are creating a very strong player in this 'battle of the titans'⁷, even comparing Tristate

- ⁶ See Figure 1.
- ⁷ Dutch News, 2017.

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City to the Beijing metropolitan area in China.⁸ The spatial vision is backed by various ngo's and interest groups, who consider that, with the region's population of 30 million people, Tristate City represents a 'sustainable urban power house'.

Another example is Avantis, a partly realized spatial plan for a cross-border business park on top of the Dutch-German border near the German city of Aachen.⁹ This plan originated in the 1990s and was developed mostly by governmental organizations, such as local municipalities, in conjunction with higher levels of government necessary to clear jurisdictional limitations by means of binational agreements. Its underlying vision entails a 'high-tech' business park with a green, leisurely environment, where high-profile technological companies can 'pick and mix' from regulations and services on both sides of the border, making the border location of Avantis a unique selling point. Local authorities furthermore envisioned a reshaping of the cross-border regional railway network in order to position the business park as a hub in that network. In view of its high-tech ambitions, various types of businesses, such as transport companies, where explicitly ruled out. Fast forward to the present, and we can see that the site is predominantly occupied by (truck) transport companies. Also, there is no railway line.

A final example is the 1997 Cross-Border Spatial Development Perspective¹⁰ (CBSDP), a plan commissioned by the Dutch-German Committee on Spatial Planning (southern subcommittee) and elaborated largely by the North Rine-Westphalian Institut für Landes- und Stadtentwicklung (ILS), a semi-private research and design institute, which for years was involved in the topic of cross-border spatial planning. The CBSDP is an extensive survey of the Dutch-German borderland and its potential for spatial-economic development, taking into account the actual and potential relations across

⁸ Tristate City Network, 2024.

⁹ See Figure 2.

¹⁰ See Figure 3 (pp. 10-11).



Figure 2 Avantis.

the border. The plan, or the 'perspective', follows the Dutch and German traditions of integral spatial planning, meaning that it analyzes various categories of land-use separately and then brings them together in a combined (integral) vision for development. I find the CBSDP a remarkable plan, considering that it envisions quite particular ideas for development, whereas there exists no authority with a legal competence for cross- border spatial planning, that is with a means of effectuating the ideas into legislation.

These, and other examples of cross-border spatial planning along the Dutch border, exhibit a certain relationship with the idea of success. As they lack the legal and jurisdictional embeddedness to make a difference to the spatial policies of the respective countries, and as, moreover, they venture to gloss out boundaries which are otherwise essential to policymaking, cross-border spatial plans elicit a paradox.

¹¹ Van der Cammen & De Klerk, 1993; Durand & Decoville, 2017.

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They aspire to steer the organization of space¹² but they do it precisely in such a manner that they fall outside known frames of reference for the existing institutions of governance, thereby minimizing their chances of success. In other words, whereas spatial planning in a delimited territory is a 'normal' case, cross-border spatial planning represents an exceptional case. What is taken for granted in the normal planning situations becomes problematic in this exceptional situation, because planning along and across territorial borders is confronted with differences, that is, with (social) boundaries additional to the territorial border, so that its outcomes are more uncertain. And indeed, an outcome in the physical landscape often lacks.

1.1.2 Aim of this book

In this book, I aim to reconsider cross-border spatial planning and its (lack of) success, noting that it encapsulates steering ambitions whilst its outlook is bleak. Based on years of fieldwork and in-depth interviews with practitioners, I look at the micro-level of this phenomenon to understand the motives, the ways in which success is performed¹³, and the ways in which obstacles in the field are navigated. It becomes clear that cross-border spatial planning does not take place in isolation of broader contexts. Specifically, the European Union provides an ideological as well as financial context which co-determines the understanding of territorial boundaries within its area. This context is obviously not static and, therefore, works as a variable factor until and onward from this day. Finally, a global context is at play as well. For example, the economy is not - or at least variably contained by territorial boundaries. Consider that now, when this book is published, is not a time of ample funding for

¹² The concept of planning as steering is developed by Van Assche & Verschraegen, 2008.

¹³ Success is understood as performed rather than measured in absolute terms. See, for example, Van Assche et al., 2012.

cross-border cooperation, whereas, in the 1990s, it was. And territorial boundaries, even within the European Union, can still be manipulated in order to enable and restrict economic activity, such as with the 2020-2022 covid restrictions and with the contemporary debate on (illegal) migration, and discussions of national sovereignty. Cross-border spatial planning, even though it apparently focuses on a delimited area, clearly takes place within world society. Practitioners obviously have their own, limited understanding of what the relevant context for their activities is. It needs to be supplemented by an outside perspective, i.e. a second-order observation which re-conceptualizes cross-border spatial planning in its world-societal context.

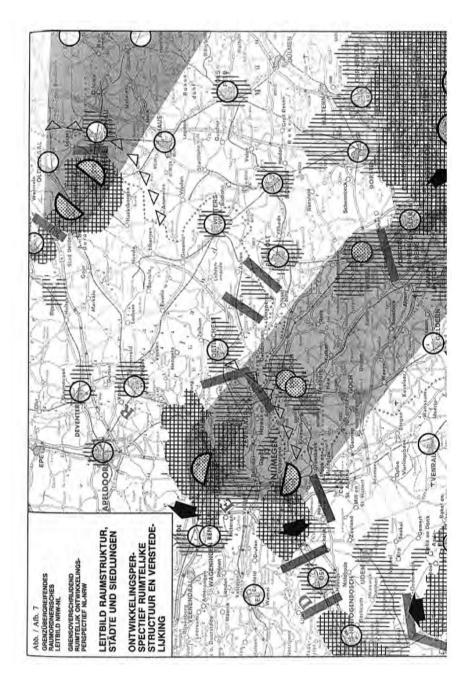
In striving for an outside perspective, my research is not primarily interested in furthering the prospect of spatial planning per sé, and as such distinguishes itself from scholarly contributions which aim to learn from planning experiences. Rather, I want to know how cross-border spatial planning manifests itself, what it achieves, and understand the social mechanisms at work – for which one needs sociological theory. This is a scholarly exercise in which existing sociological theories are 'applied' to the object at stake and, subsequently, refined and/or modified. It is then my aim to contribute to sociological theory and to make sociological theory and methodology fit for spatial planning and border research.

¹⁴ See, for example, Stichweh, 2000; Kessler, 2012.

¹⁵ Luhmann & Behnke, 1994.

¹⁶ See, for example, Pijnenburg, 2019; De Vries, 2008.

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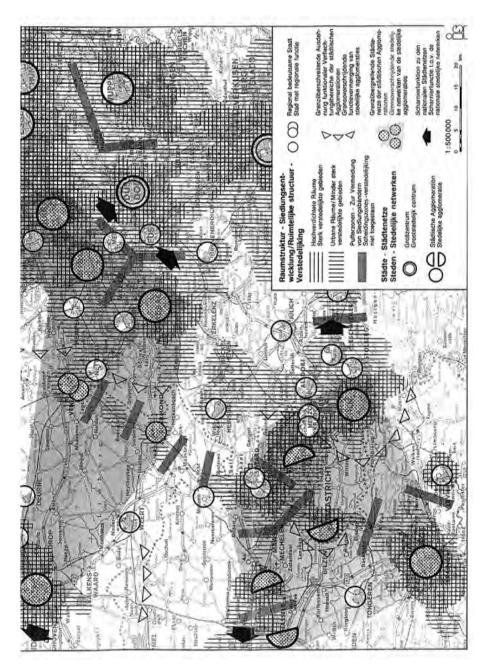


Figure 3 Map from the Spatial Development Perspective depicting "spatial structure and urbanization" (page 6).

1.2 Zooming in on the Dutch-German border

1.2.1 Historical background

The Dutch tradition of spatial planning produces a very specific condition that influences planning in the borderlands. More than any other country, the Netherlands has a history of strong, pro-active planning, which targets the organization of space as a means of reaching social, environmental, or economic goals.¹⁷ Particularly, the use of spatial concepts, with the double function of analyzing and schematizing space as well as steering its organization, is unique and reputed world-wide. 18 It is, therefore, also the foremost example of a system of spatial planning able to observe the border, and border areas, in terms of (spatial) development. This is not to say that Dutch spatial planning is the unitary instigator of cross-border planning activities along the Dutch-German border. German (planning) authorities have certainly played a role as well, including renewing interest in times when it seems the Dutch had other things on their mind.

So how does spatial planning concern itself with the border area? They adopt a discourse on peripherality, which is often already present in the local political thinking. One can (re-) frame peripherality as a problem. In terms of drawing a national map, border areas are in the periphery. Geographical ideas of peripherality often add to pre-existing sentiments of marginalization, especially by local politicians who say that the State is ignorant of border regions' problems and does little to support them; in other words, they are saying that border regions are on their own. In an effort to claim support, local politicians may argue that when one looks at the map, and imagines there is no border line, they are actually not in the periphery at all. For example, there might be quite big towns on the other side of the border, or some international

¹⁷ Van der Cammen & de Klerk, 1993.

¹⁸ Kooij, 2012; 2014.

¹⁹ Jacobs, 2012.

airport is very close, and so on. They argue that, from a transnational perspective, there is actually a lot of potential for development. In this case, the fact of its relative emptiness becomes the single legitimation for envisioning development, especially when the argument is that development has lagged behind as a result of a once more rigid border regime.

Ouite remarkably, the link between border areas and spatial planning in Germany and the Netherlands goes back to the time before the Schengen Treaty and the 'opening up' of the border. The year 1967 saw the installation of the Dutch-German Committee for Spatial Planning, a regular assembly of public officials from Dutch provinces and various German layers of government —with the exception of the federal state— which aimed to tune spatial planning and development on both sides of the border. Currently, the committee is split into two sub-committees, one for the northern stretch and one for the southern stretch of the Dutch-German border. The work of these committees is a long way from anything like a genuine cross-border spatial planning. There currently exist no formal arrangements with a structural or permanent character. Instead, in order to shed light on the phenomenon of cross-border spatial planning, I review a number of interesting initiatives, that have emerged since the early 1990s until the present. These show that at least the vision of spatial planning for cross-border areas hasn't faded with the arguable fading of EUphoria (see Chapter 3), even though recent initiatives have been unpretentious.

Rather than summing up all relevant planning initiatives, it makes more sense to provide a characterization of types and of the typical parties that are involved, with some idea of their impact. To start with the initiators, these are usually found in policy circles, especially on the Dutch side of the border, more specifically in the provincial administrations. Thus, there is a link with the above-mentioned committee, albeit not in the sense that the committee is necessarily the client. One of the major planning reports, the 1997 Cross-Border Spatial Development Perspective, was commissioned

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by the Dutch-German Committee for Spatial Planning, and largely elaborated by the ILS institute; a semi-governmental research institute based in Dortmund, Germany, with a seat on the committee's table. Up until the present, this report offers the most alluring perspective on cross-border space, with its many professionally designed maps, its analyses of different categories of land use and themes of development. As such it sets the example of cross-border spatial planning at the strategic level.

Another interesting report, one could say a forerunner of the Cross-Border Spatial Development Perspective, was the MHAL Spatial Development Perspective, published as a final draft in 1993, and later provided with extensive feedback from various governmental and non-governmental agencies, including the national planning ministries of the Netherlands and the German state (Bundesland) of Nordrhein-Westfalen. For once, this was an initiative not taken by public officials from regional or higher levels but, rather, by a network of civil servants and politicians in local governments, that is, Dutch municipalities, and German and Belgian city governments of Maastricht, Hasselt, Aachen, and Liège. Hence the abbreviation MHAL. In fact, the Dutch municipality of Heerlen also took part in the initiative, which later resulted in a name change to MAHHL, which is its current name. In this report, there is also a focus on strategic spatial planning, i.e. outlining basic and feasible directions for development. However, it zoomed in on a smaller area —nonetheless an area which included the incredibly complex tri-lingual Belgian east— and was elaborated in close connection with some other initiatives, most notably a Dutch-German business park near Aachen (see Chapter 3). With its involvement of Dutch municipalities, the administrative tier with the final jurisdiction in spatial planning, and its basis in the major cities of the area, MAHHL probably represents the most potent of today's cross-border planning networks.

1.2.2 Ambitions versus reality

The above-mentioned reports, and a number of others, from the 1990s clearly embody a belief in the contribution cross-border spatial planning could make in overcoming the border, that is, in developing cross-border areas as real functional regions. Whether this is merely the illusory desire of politicians to be part of 'something bigger' —an interesting study by itself— combined with the particular pro-active modus operandi of Dutch spatial planning, is doubtful. Arguably, European integration plays an inextricable part and it is difficult to analyze cross-border spatial planning outside of the context of the historical events of that time, such as the fall of the Berlin Wall, and the establishment of the Schengen Treaty. Nevertheless, most reports start with the disclaimer that they are in no way binding any party legally; they are merely perspectives on the development potential of border areas, but with high hopes that governments with real planning powers will steer towards these perspectives. Unfortunately, this happened only to a very small degree, and disillusionment with cross-border spatial planning and development kept further initiatives to a minimum.

It is quite easy to give reasons why cross-border spatial planning hasn't worked, or hasn't given good results. One can simply ask those involved, and they will give you reasons. For once, there is never enough money, and additionaly, participants will tell you that it depends on the people, the colleagues on the other side of the border, and how much they are dedicated to the cross-border cause, and also if one is able to build up a stable network of people over time, so that it becomes easier to find and consult one another if an issue comes up. Clearly, the ideal conditions seldom occur, so this lack is definitely seen as a reason for suboptimal performance. More technical and practical reasons are given, like the language barrier, the differences between ways of doing business, the differences between two (sometimes three) political cultures, and the ignorance of citizens. On

another note, lack of interest on the side of 'the state' is also given as a reason. The list could be extended, and many problems are common to other fields of cross-border cooperation as well. The specific case I researched with Henk-Jan Kooij on the cross-border business park Avantis²⁰ indeed highlights the connections between the various dimensions, mentioned above, such as the historical context and Europeanization process, efforts at strategic spatial planning and concrete site development. The reasoning of participants clearly shows how planning observes its own context and problems and how the success/failure distinction plays a central role in its discourse.

1.3 The European context

As becomes clear from the case study on Avantis and the fieldwork in general, the European Union is often a context for cross-border cooperation and cross-border spatial planning. Another foremost reason, however, for paying attention to the European context is that, within the scientific literature, there seems to be little interest in cross-border spatial planning outside the framework of Euroregions, cross-border cooperation, and other European Union policy fields. I believe that the influx of European funding and policy arrangements in border areas, following the breakdown of the Berlin Wall and the establishment of the Schengen Treaty, have effectively reframed the lion's share of cross- border cooperation into something European, i.e. something instigated by Europe, sponsored by Europe, and politically supported by Europe (see Figure 4). Unfortunately, it has largely done the same to the scientific research, most notably in spatial planning itself, which dominantly has studied it along the lines of the European spatial planning discourse or the evolution of European funding schemes.²¹

²⁰ Jacobs & Kooij, 2013.

²¹ See for example Knippschild, 2001; Dühr et al., 2007.



FIGURE 4 The Euregiobahn is a good example of how the European Union by means of subsidies fosters cross-border development temporarily.

But Euroregions are far from being the only framework within which activities of cross-border cooperation take place. Moreover, when it comes to spatial planning, specifically, Euroregions do not even come into the picture, because planning is not among their legal competencies. The intermingling occurs where episodes of cross-border spatial planning take an eye on possible extra funding by Euroregions —but they need not necessarily do so. The Dutch-German Committee for Spatial Planning, for example, predates most Euroregions and does not grant them any significant role. Nonetheless, the reality of cross-border cooperation is saturated with symbolic and material reference to the European Union. Therefore, a brief sketch of the European interference in border areas is useful for understanding the characteristics of cross-border spatial planning episodes.

1.3.1 The construction of European border regions

A European dimension arguably appeared in the 1950s and was consolidated in the 1970s, when along the interior borders of the European Union, many new institutions for cooperation

were founded. Particularly well-known are the so-called Euroregions, which resulted from the EU's regional policy. In this policy, the territory of the collective member states is re-compartmentalized into a large number of so-called NUTS regions, based on welfare levels, making it possible to gear subsidies towards the places that lagged behind in terms of economic development, independently of the economic policies of member states themselves. As the European Committee notes the relatively underdeveloped status of border areas and is keen on strengthening integration across its borders, it has included cross-border regions in its NUTS schema. Various funding schemes make it possible for these regions to profit from the EU regional policy budget.

The fact that relatively little policy attention has been paid to the border area by national planning systems, has been a point of interest to the European Commission, already from the early days, for the European Union is concerned explicitly with the crossing of national borders and the construction of cross-border policy. Especially since the creation of the internal market, towards the end of the 1980s. attention to the spatial development of border areas has emerged. Most of all, it was the Interreg program that became an important policy instrument. Interreg, its successors and related funding schemes, and the current program of European Territorial Cooperation, which is called Interreg VI and has a budget of 10 billion euros from 2021 to 2027, all aim to strengthen the economic and social cohesion within the European Union. This instrument is intended to increase cross-border and transnational cooperation as a means to reach balanced development across the European Union's territory. The idea behind Interreg was that the removal of internal boundaries would give a boost to the development of border areas. Rather than peripheral places along the edges of member states, they would become regions that embodied the connection between neighboring countries. Stimulating cross-border cooperation in the direct vicinity of nation-state borders was and is an important part of this policy. Aided by common development strategies and programs, cross-border economic and social cooperation would be able to take shape.

The new cross-border regions were seen as laboratories, or trial areas (in Dutch: proeftuin), of European integration.²² The term was often used in the beginning days of Interreg. The funding scheme organizes cross-border cooperation thematically around spatial structure, economy, technology and innovation, environment, nature and landscape, labor market, social integration, and technical assistance. In addition, a European science network for spatial planning, ESPON, was created to stimulate thinking at the transnational and European spatial scale. Largely financed by the European Union, this research agency focuses on exploring dimensions of European spatial policy. In their reports, like the relatively well-known European Spatial Development Perspective (ESDP), the need for cross-border cooperation is stressed incessantly. It is suggested that cross-border networks and cooperation arrangements could be instruments to deal with development disadvantages of border areas.²³ ESPON suggested the following priorities for border regions: 1) stimulating cooperation between contiguous border areas so cities and municipalities can develop a common economic space; 2) improved cross-border integration of regional public transport and main (national) transport networks; and 3) policies for landscape development and environmental protection in favor of ecologically vulnerable areas to form a cross-border network of biotopes. 24

1.3.2 Academic discourse

With the construction of the European Union and the abovementioned ESDP, a lively debate concerning cross-border cooperation has emerged in political geography, spatial planning and related disciplines. This literature has highlighted the difficulties inherent in cross-border or transnational (spatial)

²² Van Houtum, 2015; Pijnenburg & Van Houtum, 2018.

²³ Eker & Van Houtum (eds.), 2013.

²⁴ ESPON website, accessed 2014.

cooperation,²⁵ showing, for example, that policy geared at stimulating cross-border cooperation, in reality, is still bound to national power and legislation, despite the construction of cross-border regional administrations, i.e. Euroregions. As a result, the policy is still nationally oriented. Some academics put forward the argument that European societies are already highly integrated, so that the national orientation of cohesion policies is artificial —even though understandable in the context of national identity politics.²⁶ Nonetheless, the nationalist discourse on border regions and cross-border cooperation makes it difficult to think about the border area as a distinct entity that might be planned and developed independently.

Another point of criticism towards European cohesion policies, especially funding schemes such as Interreg, both by academics as well as local and regional officials, is aimed at the project approach. Funding usually takes place on the basis of projects which, however, end or get forgotten as soon as funding dries out. This adds to frustrations on the already heavy bureaucratization involved in cross-border cooperation arrangements, which therefore affects every individual project.²⁷ What was envisioned as accommodating and provoking spontaneous cooperation initiatives, has turned out as the opposite, due to the demand of co-financing, large amounts of paperwork, and the all too many checks by accountants. Indeed, some potential cross-border cooperation initiatives are even prematurely canceled because of such obstacles. In sum, one can say that the European Commission has undertaken major efforts to stimulate cross-border cooperation, mostly by means of financing projects, through institutionalized cooperation arrangements in the form of administrative bodies which, however, lack decision-making power, are democratically poorly embedded in the region, and suffer

 $^{^{25}\;}$ Examples include Blatter & Norris, 2000; Van Houtum, 2000; Perkmann, 2003; Scott, 2000.

²⁶ Luhmann, 1982.

²⁷ Van der Giessen, 2014.

from excessive bureaucratization and accountability, imposed by national governments and the European Union itself.²⁸ As a result, ample energy is put into the means, but the end, that is, cross-border cooperation, shifts to the background. I argue that it is useful to consider cross-border integration and spatial development, leaving aside the activities of Euroregions. They are part of the discussion and are often understood as an important context by planning practitioners themselves, but they cannot be presupposed within our analytical framework, that is, on the second-order level of observation.

1.4 Consideration of the academic scholarship

Even though I review relevant literature in all of the following chapters, it would be helpful to give a short and general overview of the academic debate, mostly in order to explain my position and as an argument for a transdisciplinary approach. There appear to be two major fields in social science which offer perspectives on the problems of cross-border spatial planning: border studies and academic spatial planning. With the emergence of cross-border regions, one could expect some intermingling of the two but, rather, it seems that limology, with its roots in geography, has converged with political geography and geopolitics. Fruitful combinations of border studies and planning do not abound. However, there have been some interesting attempts at applying concepts from border studies to spatial planning research²⁹. I will, therefore, first pay attention to academic debate in border studies and, second, comment on the spatial planning literature, reflecting also on 'bridging' concepts, like that of

²⁸ Kramsch, 2008; Van der Giessen, 2014.

²⁹ Sohn, 2014; Paasi & Zimmerbauer, 2016; Pijnenburg, 2019.

the 'borderscape'³⁰. This aims to explain why Chapters 4, 5 and 6 are set up to develop certain pieces of theory.

1.4.1 Border studies

Scientific attention to borders and border areas has increased strongly over the past 30 years.³¹ The border, border regions and their relation to globalization and Europeanization, the construction of borders and identities, and Euroregional cooperation, have been reported about many times. For example, it is commonly known that state borders pose barriers to spatial-economic development along and, especially, across state borders.³² The Dutch-German and Dutch-Belgian borders are cases in point.³³ Ever since cross-border cooperation practice has intensified and become a European policy field, there has been a rise in academic research and specialization, especially where governance is concerned. To be sure, there have been numerous attempts to analyze the intricacies of cross-border regionalism and governance in European border regions, most of which take the 'Euroregion' as a starting point.³⁴ This has yielded many useful insights about the apparent discrepancy between Euroregions' integration ideal and the persistently 'bordered' reality of everyday life in the borderlands.³⁵ To mention a few, nation-states are argued to grant too little room to cross-border regional policy innovation, 36 and Euroregions are blamed for a 'democratic deficit'.37

 $^{^{30}\,}$ Dell'Agnese & Amilhat-Szary, 2015; Brambilla, 2015; Krichker, 2019; Scott, 2020.

³¹ Paasi & Zimmerbauer, 2016; Newman, 2006; Van Houtum, 2000.

³² Albrechts, 1999; Knotter, 2002; De Vries, 2008.

³³ Eker et al., 2013.

 $^{^{34}\,}$ Jacobs & Varró, 2014.

 $^{^{35}\,}$ E.g. Knippenberg, 2004; Kramsch, 2008; Johnson, 2009; Jacobs & Kooij, 2013.

³⁶ Perkmann, 2007; Popescu, 2008; 2012.

³⁷ Kramsch, 2004; 2008.

These analyses were only possible as a result of a shift of focus from purely empirical description of regional developments in the border area, 38 towards the explanation of border and identity dynamics, often at a national level. The border is now seen as a practice, a socially constructed experience that results in a mental distinction, rather than a static line on a map. Fundamental scientific attention, therefore, focuses mostly on psycho-social constructions and politicization of national borders and national identities.³⁹ The constructed experience requires constant (re-) production and confirmation. Thus, the conceptual meaning of the border has changed in scientific discourse; rather than a closed entity, it is now seen as a construct that depends on interpretation, narration, and confirmation; that is, in short, dynamic.⁴⁰ Such conceptualizations emerge from discourse-oriented approaches. One can say, in general, that border scholars have a constructivist outlook.

With the move to constructivism, for example through discourse theory and analysis, an important and necessary step has been taken in the direction of refinement and deepening of the scientific debate on borders and border areas. The backdrop of this approach, however, is a general skepticism towards border theory⁴¹ in favor of theories of social construction, which often remain implicit in the critical scholarship of the discipline. The development of theory is therefore fragmented, i.e. one is not concerned with working around a general theory and contributing to that but, rather, individual scholars offer individual perspectives, based on a variety of sources in postmodernism/post-structuralism. Sometimes, the aim is theorization but, at other times, the

³⁸ The limology of e.g. Prescott, 1987; Rumley & Minghi, 1991.

³⁹ Paasi, 1996; Van Houtum et al., 2005.

⁴⁰ Newman, 2006; Van Houtum & Van Naerssen, 2002.

⁴¹ See, for example, Paasi, 2011.

aim seems to be critique⁴². Border studies as such has yielded many interesting insights on how borders are constructed and negotiated in practices of b/ordering⁴³ which are, however, not unified in one theoretical framework.

1.4.2 Academic spatial planning

Border studies is not so much a scientific discipline as perhaps a transdisciplinary field, only part of which is interested in policy. But not so much in spatial planning policy, probably because of the focus on Euroregions, which have no planning competences. The spatial planning discipline itself, with its inherent focus on policy, on the other hand, has paid meager attention to borders and, where it has, much literature on cross-border spatial planning is concerned primarily or exclusively with spatial planning as a possible domain of cross-border cooperation in the framework of the EU's territorial agenda, regional policy, and Interreg funding.⁴⁴ Just like scholars of cross-border governance, in general, planners with a focus on border regions seem to be joined at the hip to the framework of Euroregions. There are also examples where this is not the case⁴⁵ but this concerns an inventory of problems and recommendations of more European involvement. An analysis of the literature on planning in border regions, points to entanglement of this scholarship with discourses of European spatial planning and cross-border cooperation as de-differentiated scientific/ policy discourses, by which I mean that it aims to contribute to these policy fields rather than just provide an academic, second-order observation which shows the way in which policy realities are constructed and its borders (re-) produced.

⁴² A Critical Border Studies (CBS) is indeed proposed by e.g. Parker et al., 2009; Parker & Vaughan-Williams, 2012.

⁴³ Following Van Houtum, 2010; 2021; Brambilla, 2021.

⁴⁴ E.g. Knippschild, 2011.

⁴⁵ E.g. de Vries, 2008.

In an article by Paasi and Zimmerbauer, 46 the abovementioned entanglement with European spatial planning is refreshingly absent. The authors review the way in which planning scholars have dealt with the issue of contemporary borders and (cross-) border regions on a more conceptual level, but also how planning practitioners, notably in Finland, have struggled to work with 'relational' maps, which depict 'fuzzy' borders and cross-border flows, including planning ideas without exact boundaries (e.g. corridors and development zones).⁴⁷ This insightful analysis comes to the same conclusion I myself arrive at: wherever spatial planning aspires to transcend territorial borders by envisioning flows and relations across these borders, it stumbles upon the paradox that it needs those borders, especially as administrative/legal boundaries, in order to get anything done. Suggesting the notion of 'penumbral border' as a possible way out for planning scholars and practitioners, however, Paasi and Zimmerbauer, in my view, do not venture very much beyond the common ground in academic planning, that is, trying to improve planning practice.

Not only in the example mentioned above but also in many other publications⁴⁸ scholars launch a plethora of new and refurbished concepts, attempting to invent better representations of contemporary planning reality. However, most of the time, these concepts do not have any clear anchorage in theory, which makes it unclear whether they are useful to science at all. For example, the concept of the penumbral border refers to the multi-layered roles of borders in planning. But do we really need the prefix 'penumbral', as it is perfectly well possible to analyze spatial planning as dealing with multiple boundaries and multilayered territorial borders, i.e. borders which signify different things to different people, groups etcetera? We can now ask: are there also non-penumbral

⁴⁶ Paasi & Zimmerbauer, 2016.

⁴⁷ Paasi & Zimmerbauer, 2016, p. 81.

⁴⁸ Some of which are quoted by Paasi & Zimmerbauer, 2016.

borders? We might end up with a new limology aimed at classifying borders as more or less penumbral. This is clearly not the direction in which Paasi et al. want to go, but coining the concept also doesn't lead to better theories in science, as it remains unclear to which framework it belongs and in what way it is related to other concepts.⁴⁹

Analyses of cross-border spatial planning often seem restricted in their societal scope, taking only the fabricated borders of particular cross-border regions into account. Even though Paasi and Zimmerbauer,⁵⁰ for example, note that penumbral borders consist of "... administrative, juridical, social, cultural, economic, identity, linguistic, and possibly other layers", they do not venture to explore these layers in terms of their geographical stretch. Writing with the idea of world society⁵¹ in mind, many of these layers extend beyond the confines of territorial borders and mark universal system dynamics. The apparent tendency to restrict oneself to territorially defined policy discourses and the weariness to include societal theory, make it difficult, therefore, to come to a deeper understanding of why paradoxical patterns along the border keep occurring, and why even the all too willing Finnish do not pull it off.

1.4.3 Borderscapes and borders as resources

Within the contemporary debate in border studies, yet other concepts are elaborated that provide new perspectives for border research and, more importantly, potentially bridge the gap with spatial planning. Reviewing this scholarship, it appears to me that new concepts are largely elaborated as representing new perspectives, without however sketching out theories in which they are embedded. Authors often refer to earlier terminology in border studies, arguing that new

⁴⁹ The same holds true for the fuzzy boundaries and soft spaces of Allmendinger & Haughton (2009), for example.

⁵⁰ Paasi & Zimmerbauer, 2016, p. 87.

⁵¹ Luhmann, 2012a; 2013.

concepts carry on, broaden and deepen this legacy. New concepts are thus presented to answer to contemporary challenges both of an academic as well as of a societal character. I believe that scientific concepts -concepts guiding scientific analysis- in order to gather precise enough significance, are necessarily embedded in a theoretical framework, consisting of other concepts, which stand in particular relation to each other. This, however, seems not to be the preferred avenue in border studies. Rather, the conceptual evolution of border terminology exhibits a more postmodern character⁵², where scholars draw inspiration from various sources, such as philosophy and art. Nevertheless, I would like to explore possible resonance between new lines of thinking in border studies and the theoretical framework developed in the core chapters of this book.

The most notable concept currently being discussed among border scholars is that of 'borderscape(s)'.⁵³ Scott⁵⁴ provides a general definition of bordercapes as "socio-political panoramas that emerge around border contexts and that connect the realm of high politics with that of communities and individuals who are affected by and negotiate borders". If upholding such a definition, moving toward scientific analysis, it will be necessary to unpack the full constellation presented in this one sentence. In other words, it should be made clear what is understood by 'socio-political', 'panorama'⁵⁵, 'border contexts', and 'high politics'. Unfortunately, Scott offers no such clarification and apparently accepts the 'irresistable vagueness' of the concept.⁵⁶ Van Houtum,⁵⁷ among others, draws attention to the meaning of the suffix '-scape',

⁵² Cf. Stojanovic, 2018.

⁵³ Brambilla, 2015; Van Houtum, 2021.

⁵⁴ Scott, 2020, p. 151.

⁵⁵ It might refer to the border as a 'perspectival' construction, as Brambilla (2015, p. 22) explains the philosophy of Arjun Appadurai.

⁵⁶ Krichker, 2021.

⁵⁷ Van Houtum, 2021.

emphasizing that a borderscape involves 'scaping', that is construction, making, remaking, something which might take place in the mundane, everyday construction of space⁵⁸ or even in collaborative practices deliberately setup amongst local actors in border regions.⁵⁹ Seeing borders as borderscapes thus seems to be a next step in the processual understanding of borders, which have characterized theorizing in border studies at least since the seminal paper of Van Houtum and Van Naerssen,⁶⁰ which introduced the verbs 'bordering', 'ordering', and 'othering' as being central to border (trans-) formation and negotiation. I would say, than, that borderscapes research, as distinguished from (old school) border research, involves an inherent attention to the 'becoming',⁶¹ to social processes that evade pre-existing border models.

Even though 'borderscape' as an analytical concept points to processes of border formation rather than to predetermined border models, and as such may be linked to or embedded in further theory development, there is also a normative inclination to this literature, which utilizes the term to argue for its *critical* potential. Brambilla, for example, postulates that "the bordercapes concept provides a political insight into critical border studies [...] to embrace ethical and normative issues of in/exclusion..."62 and argues for "elaborating actual tactics to return political agency [...] to migrants and refugees, as well as civil society, groups, and individuals inhabiting contemporary borderscapes."63 Advocacy ideals also seem to motivate Cooper's reflections on border theorizing, as he

⁵⁸ Referring to Lefebvre, 1991.

⁵⁹ An example is the doctoral research of Vincent Pijnenburg, 2019.

⁶⁰ Van Houtum & Van Naerssen, 2002.

⁶¹ The work of Gilles Deleuze might offer inspiration for further theorizing in this direction. See for example Deleuze & Guattari, 1987; Buchanan & Lambert (eds), 2005. In border studies, this avenue is pursued by Parker, 2009.

⁶² Brambilla, 2015, p. 18.

⁶³ Brambilla, 2021, p. 14.

writes that "useful theories of bordering must be fluid, malleable and continuously produced in the same way that borders are continuously made and remade."64 To be sure, 'usefulness', in this case, seems to refer to the particular ideological agenda which aspires to "profound normative and justice theorizations", "more critical studies on the renaissance of classic borders and its antagonistic biopolitics and shameful necropolitics (the politics of letting die)" and "evocative counter studies that discuss the way forward towards globally more just borders", as Van Houtum⁶⁵ writes. If not explicitly sceptical of (a) border theory, I would argue that these reflections render the borderscapes concept unfit for embbeding it in theorizing aimed at stabilizing its' meaning in relation to other concepts assembled within the theory. That is, a stability of conceptual meaning internal to a particular theoretical framework, which might well leave open empirical reality manifesting itself in diverse or unexpected ways.

A second line of thought, additional to 'borderscapes', is that of the border as a resource. Sohn⁶⁶ writes that "the opening-up of borders represents a fresh opportunity for urban border areas to reinforce their positions within the networks of a globalized economy and to assert their autonomy as cross-border regional entities." Actors may "exploit the benefits of position or of difference", whereby "as spaces of hybridization or as objects of recognition, borders can be seen as a resource." This perspective, in the work of Sohn⁶⁷ mainly geared towards cross-border metropolitan regions, explores avenues of cross-border integration, which take both geographical as well as economic differences as bases for cross-border cooperation and spatial planning. As such, this approach seems to align well with the topic of this

⁶⁴ Cooper, 2020, p. 18-19.

⁶⁵ Van Houtum, 2021, p. 40.

⁶⁶ Sohn, 2014a, p. 1698.

⁶⁷ Also see Sohn, 2014b; Sohn, 2020.

book and its empirical reference, that is, to Dutch-German cases of cross-border spatial planning. For example, the cross-border business park Avantis, between Heerlen (NL) and Aachen (DE),⁶⁸ was a result of precisely such ideas: exploiting the differences marked by the state border and, thereby, fostering economic development and cross-border integration. However, on a theoretical level, one cannot presuppose that this strategy is in effect pursued by 'actors'. The idea of borders as resources, therefore, seems to hinge on being able to observe, in the urban environment, certain predetermined models of actor behaviour, measurable by chosen variables,⁶⁹ thereby narrowing down the horizon of possibilities.

To what extent do these ideas, 'borderscapes' and 'borders as resources', inspire spatial planning research in the context of border regions? As the axiom of borderscapes thinking is that borders are scaped/shaped, there is a logical line of thought which envisions spatial planning actors to work at (re-) developing border regions, deliberately exploiting opportunities where border differences function as resources. However, because in practice, this approach has not always been successful and, often, it doesn't take place at all, two possibilities are left for academic planning researchers. The first is to seek out examples around the world which, to the eye of the beholder, embody successful processes of ('functional'⁷⁰) cross-border integration, and study these cases retrospectively along the lines of how and when relevant actors have applied strategies of using the border as a resource. The second possibility is a participatory research approach in which actors in border regions, together with academic researchers, deliberately set up and participate in a

⁶⁸ See Chapter 3.

⁶⁹ In fact, Sohn elaborates two models (2014b) and a typology (2014a, p. 1708), which makes this line of work seem a present-day example of limology.

⁷⁰ Sohn, 2014b.

project that has these goals. A clear example of this approach is Pijnenburg's action research,⁷¹ which succeeded in bringing together various stakeholders to explore scenario's on what the future border region might look like, making use, among others, of the idea that the differences marked by the border may be seen and exploited as being attractive. Both these approaches yield interesting insights on particular border regions, but they do not offer theoretical frameworks that may be applied universally for understanding the particular manifestations of cross-border spatial planning, and its successes and failures in different border regions.

To conclude these reflections on recent conceptual innovation in border studies, I would like to consider its compatibility with my work in Chapters 4-6. The consensus in border studies is on the dynamic nature of borders; the discourse on borderscapes and borders as resources, in my opinion, are not a turn away from the processual turn in the discipline, which is based on that premise. I wholeheartedly agree and ascribe to this view on what borders fundamentally are: rather than static lines that absolutely delimit actors' behaviour, borders (and boundaries) are shaped socially, reshaped, negiotated, signified, (de-) constructed. As such, they never acquire definite meaning; meaning is always contextualized in the moment, be it in discourse, practices or systems. For me, however, this requires the scientific paradigm to be based around a theory that ascribes to this ontological view of borders and boundaries, but is a theory nonetheless. What I attempt in this book, is to contribute to such a theory, rather than go with border studies' flow which seems to hold that "[...] theories of bordering must be fluid, malleable and continuously produced in the same way that borders are continuously made and remade."72 This mirroring of empirical reality and scientific theory will not lead to any paradigm or paradigmatic shifts in social science, because it

⁷¹ Pijnenburg, 2019.

⁷² Cooper, 2020, p. 18-19.

is not based on the idea that scientific theory sits on a higher level of abstraction, where it may hold conceptual stability, at the same time when its empirical object is in flux. In this book, to put it in the most simple terms, I aspire to a theory able to explain the manifold and ever-changing nature of social reality, whilst not succumbing to multiplicity and perpetual change itself. In the following section, I will therefore outline the basic conceptual/theoretical choices that hold as foundations for further theory development.

1.5 Beyond EUphoria: systems theory

In Chapter 3 of this book Henk-Jan Kooij and I argue how a general euphoria with regard to the waning of Europe's internal state boundaries has contributed to cross-border spatial planning and development in the 1990s. However, this notion of euphoria -which, for the occasion, we have recoined as EUphoria- is not a scientific concept. It is coined for rhetorical purposes and in order to explain the upsurge of cross-border spatial development discourse. The underlying intention of the Avantis case study and Chapter 3 of this book is to provide a sketch of how cross-border spatial planning takes place in practice and how it is largely interwoven with European subsidies and integration programs. Nonetheless, both before and after the EUphoria of the 1990s and early 2000s, there was cross-border cooperation, even in the field of spatial planning. We have mentioned the Dutch-German Committee for Spatial Planning, founded in the 1960s, and city networks, like MAHHL,⁷³ which continue to function today. It is certainly not the case that, with EUphoria, this kind of cross-border cooperation has faded as well. Therefore, we would want to move beyond EUphoria as an explanation for cross-border spatial planning's harsh reality and into other theoretical strongholds.

⁷³ Formally known as MHAL.

1.5.1 An EU-transcending perspective

In the case of the Avantis business park, many relevant aspects and pertinent border problems come to the fore, including technical (the electricity network), political (governments and budgets), legal (who's responsibility), economic (tax differences), and so on. Such problems are a general feature of most if not all sectors of cross-border cooperation, as is to be expected. We have encountered them in case studies on public transport (railways) planning,⁷⁴ culture and tourism, ⁷⁵ nature and recreation, to name a few. Standard explanations are quite obvious and can be found already in the early literature on cross-border cooperation, published in the 1990s. That is, both the policy texts and accounts produced by fieldwork as well as the academic literature. Nonetheless, such literary attention, but also the financial aid given by the European Union (thence, the Commission of the European Communities), did not solve these problems.

The interference of the European Union in Dutch (and other European) border areas is likely here to stay though, in the form of Euroregions and funding schemes that aim explicitly at integration and development. As the attribution of subsidies is largely based on differences in the state of economic development, compared across regions of the European Union's own regional compartmentalization of it's territory (NUTS), arguably, the primary focus of this interference is economic development. It makes analyzing cross-border cooperation from an EU-transcending theoretical perspective more complicated because it will often be hard to determine whether specific transformations of cross-border space are due to capitalization on European funds—because

Many interviews were done (see appendices) but, unfortunately, I haven't published on this topic.

⁷⁵ Varró, 2009.

⁷⁶ Scott, 2000; Jacobs & Varró, 2014.

Also see Jensen & Richardson, 2004.

budgets, once created, will often be absorbed by the field— or to cross-border spatial planning. In this book, I circumvent this problem by moving up to a more abstract level of analysis. This means, I focus on (the scope for) cross-border spatial development and integration by local and regional authorities in borderlands, *without* the use of special funding per se. This embodies a more fundamental research position, not aiming for a quick-scan of policy obstacles in the service of improving or setting up cross-border cooperation policies.

The argumentation that cross-border cooperation is not successful enough so we should determine the causes in order to improve cooperation, is already based on the normative foundation that cooperation, however understood, is what we need. As a propelling force for academic research such a conviction may be relevant, but it is not the basis of a theoretical perspective. Especially after post-structuralism one would expect a threshold of reflexivity in that one can no longer proceed without a deconstruction of one's own concept of successfulness.⁷⁸ Therefore, I look for conceptual precision and consistency and want to rid the relevant concepts of too much or too little politics. On the one hand, in the case of borders, there is certainly a bias towards normativity, a 'critical' border studies, even skepticism towards a border theory.⁷⁹ On the other hand, there are (political) regions and (spatial) planning, phenomena that are usually clad in political neutrality. But we know they are not.⁸⁰ For me, this is no reason for either criticizing cross-border cooperation or rejoicing in it. All the more reason to strive for conceptual precision. And this means not only within the respective fields of border studies, regional studies, and spatial planning, but across it! As empirical phenomena, borders, regions and cross-border spatial planning cannot exist without one another. It is only academic specialization, the maintenance

⁷⁸ Luhmann, 2012a.

⁷⁹ For example, Paasi, 2011.

E.g. Jensen & Richardson, 2004; Flyvbjerg, 2001.

of expertise and reputation, that benefits from segregation.⁸¹ Therefore, in what follows, I aim to redefine concepts, to theorize borders, regions, and planning analyzable by means of the same theoretical framework.

1.5.2 From discourses to social systems

The case study of the Avantis business park in the third chapter of this book is based loosely on discourse analysis, an approach that is very suitable for uncovering the contingency of the seemingly natural way in which a planning process evolves. It is able to show that what is rational from the perspective of one discourse might be irrational from the perspective of another. Power is often seen as deciding which discourse provides the prevailing rationality.82 But the discourse concept itself is notoriously ambiguous. For example, what does a discourse consist of? And where are the boundaries of a discourse? It is also difficult to use discourse analysis for self-observation without arriving at the conclusion of the most astute relativists, that is: "anything goes". I like to take planning research more seriously as a science, which entails greater precision in the delineation of concepts. For this reason, I have worked with Niklas Luhmann's theory of self-referential social systems.

In the theory of self-referential social systems⁸³, henceforth systems theory, as developed by the German theorist and sociologist Niklas Luhmann (1927-1998), discourse is reconceptualized as communication which, in turn, is defined as the unity of information, utterance, and understanding. And understanding is misunderstanding at the same time because this step entails the interpretation of an utterance, which means that it seldom exactly duplicates the information conveyed by the utterance. Either way, without a unity of information, utterance, and understanding, it is not possible

⁸¹ See Fuchs, 2001a.

⁸² See Flyvbjerg 1998; 2004.

⁸³ Luhmann, 1995; 2012; 2013.

to speak of communication.⁸⁴ Communication constitutes a society differentiated into various social (sub-) systems, which process meaning by communicating. Psychic systems⁸⁵—our individual minds— also process meaning but, operationally, social and psychic systems run parallel and are structurally coupled⁸⁶. The social system processes meaning in the form of communication, whereas the psychic system processes meaning as thought. Thus, when the social is understood as communication, this means that society consists of communication and not of thought, that is to say, society does neither consist of the approximately 8 billion individual psychic systems in the world, nor of their bodies but is enacted in communication for which these psychic systems are but a precondition.

According to Luhmann, communication and society take the form of self-referential systems of communication, in short: social systems⁸⁷. For him, there are various types of social systems, with society understood as the encompassing social system of which all communication is a part. A perspective outside society, for example through science, religion, or politics is not possible; i.e. these are all part of society. Within society, it is possible to distinguish interaction systems, which require co-presence of people, organizations, based on decisions, and functional systems, representing the prevalent differentiation form of modern society.⁸⁸ In this research, I deal mostly with organizations and functional systems, not because there is no relevance for psychic and interaction systems but because organizations and functional systems appear as the context for psychic and interaction systems – individuals and groups—where an influence could be gained. Why does communication evolve into systems? This is

⁸⁴ Luhmann, 1995.

⁸⁵ The translation of "Psychische Systeme" used by Baraldi et al., 2021.

⁸⁶ Luhmann calls this "structural coupling", see e.g. Braeckman, 1996.

⁸⁷ Luhmann, 2012b; 2013.

⁸⁸ Luhmann, 2012a.

precisely due to the self-referential nature of communication. Consider the basic example of a friendship where, in the course of time, the participants develop patterns of communication which are only natural to themselves, and not to outsiders, because the communication within their circle refers back to their earlier communication. Scale up this process to, for example, organizations, and one can begin to grasp the multiplicity of operationally closed circuits of communication in which meaning comes about internally as are sult of communication that refers to earlier communication. In this book, the social system phenomenon is taken to be objectively true and empirically verifiable (observable). Social-constructionists with strong objections against this premise will have difficulty appreciating the analyses and theory constructions I offer, unless for reasons of being sympathetic to (a number of) its conclusions, as a pure coincidence. Let us move on a little further and look in more detail at how systems emerge and survive.

1.5.3 Distinction and indication

In a world of sheer sensory abundance, one can bark, grunt, or howl at things but more complex cognition starts with the drawing of distinctions by means of language. It is at this point where the meaning circulating in society finds its origin, according to Luhmann⁸⁹. In order to understand what systems theory accomplishes, it is necessary to look in more detail at how meaning is produced by means of distinction and indication. Luhmann often explains this part of systems theory by referring to George Spencer-Brown's Laws of Form.⁹⁰ Spencer-Brown (1923-2016) was a well-known logician whose ideas had diverse influences. In the context of systems theory, *form* is understood as *meaning form* and a brief summary suffices here to explain the basic mechanism underlying the autopoiesis (self-production) of a social system by means of forms, as developed by Luhmann.

⁸⁹ Luhmann, 1995.

⁹⁰ Spencer-Brown, 1972.

The first operation consists of the drawing of a distinction, for example good/bad. The second operation is to indicate one side of the distinction.⁹¹ This is what usually happens in communication, one can converse about something being good, remaining on the one side of the distinction, socially constructing the category of the good, unaware of the other side, not necessarily making the other side explicit. Nonetheless, there is always another side to the distinction, which co-evolves. Communication can only be either on the one side, or on the other side, and it takes time to cross the boundary. Good becomes a reality only at the cost of also making bad a reality. But within the responsible case of communication, the form itself, that is, the distinction with its two sides, if you will, is not visible as a unity. The form is the unity of the difference⁹² responsible for meaning, for making sense in communication. If not for another side, the utterance 'good' might just be a bark, a grunt or a howl in the night, which indicates nothing other than its difference from silence.

According to Luhmann, the distinctions we draw in communication are concurrently the guiding structures of our observations. When observing, we necessarily focus on one side of a distinction, usually at the expense of awareness of the other side of that distinction. To put it differently, we speak and see ontologically, we create objects in reality and forget that the objects owe their existence to us drawing distinctions. The unobserved sides of our distinctions are the blind spots of observation. Paradoxically, observation cannot be observed by itself at the moment it occurs. This requires another observer, who observes with another distinction, i.e. the distinction between distinction and indication. Observing scientifically, for instance, requires the distinction between true and false, even though we are usually not explicitly

⁹¹ Concise explanations of this process can be found in Braeckman, 1996, and Luhmann, 2006.

⁹² Luhmann, 2006.

aware of this anymore, as we converse in further distinctions, for example those significant to a scientific 'paradigm'.⁹³

1.5.4 The distinctions of systems theory

Systems theory, as a subsystem of science, is one of those observers guided by distinctions. But there is something paradoxical about this observer, namely that it implicates itself. It observes itself by means of the same distinctions it uses to observe society -of which it is itself a part. This is why Hans-Georg Moeller distinguishes systems theory from other constructivist theories, such as discourse theory, as being radical.⁹⁴ It is, in any case, inherently reflexive. So what are the distinctions of systems theory? First of all, the general 'binary code' of science: true/false. 95 Secondly, the particular distinction that enables systems theory to observe systems: system/environment. A system is distinguished from an environment, and this distinction will underlie also the analysis of cross-border spatial planning in the upcoming chapters. Only by using the distinction in self-observation (second-order observation) do we see that we are dealing with a distinction drawn by a system rather than by the world, i.e. the paradox of all cognition. In first-order observation, the description of reality, we cannot see this as we can only observe one side of the distinction and it takes time to cross to the other side. 96 In this sense, therefore, the existence of systems is objectively true.⁹⁷

1.5.5 Constructivism and sociology

The analyses in this book follow a constructivist pathway. When it comes to spatial planning on and across borders, and the encounter between different planning 'systems', there is

⁹³ Cf. Kuhn, 1970.

⁹⁴ Moeller, 2012.

⁹⁵ Luhmann, 1990a; Braeckman, 1996.

⁹⁶ Luhmann, 2012a, p. 215.

⁹⁷ This is Systems Theory's positivism.

quite a lack of constructivist research, which should surprise as, for example, in border regions it becomes apparently clear how historically specific, contingent, and non-self-evident systems of spatial planning are. Here, one encounters precisely the margins of such systems; one can no longer draw one's spatial schemes, and one encounters difference with another system, forcing oneself to become reflexive just like the reflexivity of the radical constructivist who applies its constructivism also to himself. Planning in border regions finds itself in one of the most difficult settings imaginable. Its newly-gained reflexivity can turn into a kind of self-contestment, adding to an already existing external doubt about its effectiveness. In addition, the design of places is less than self-evident when a border is in the way. One has to shift that border, redefine one's territory, and so on. What, within the bounds of a municipality is often taken-for-granted, i.e. the pre-given territory, has to be built -socially constructed— from the ground up. It is these political, and territorial, aspects that gained very little attention in planning theory, so far, but in border regions it becomes strikingly clear that territory is a premise for planning. We can no longer side-step the theorization of planning's premises, including its paradoxes. All aspects which cater to a constructivist approach.

In similar stroke —and border studies already knows this— we can no longer approach the issue of nation-states in an *essentialistic* way, that is, to assume their objective existence and proceed to analyze the differences between the one and the other nation-state, for example, the differences between the Netherlands and Germany, or, for that matter, between the Dutch and the German planning system. For, if you look in detail, how grotesque appear such notions as nation and national culture, and how much of our culture goes beyond the logic of territorial borders?⁹⁸ By sticking to such comparisons, one could neglect to bring in a more

⁹⁸ Luhmann, 1982.

sophisticated understanding of contemporary society and its borders. And by this, I do not mean simply the addition of another level of governance, for instance, the European Union for a more comprehensive analysis. Rather, we should ask who observes in this way of positing nation-states as objective entities—actors even—and with what consequences?

The shortcomings of planning theory, when it comes to dealing with contested settings and a more sophisticated, constructivist understanding of contemporary society, that is, world society, have pushed me in the direction of sociological theory, although it is true that various poststructuralist ideas have been making their way into planning theory in recent years.⁹⁹ What is important for me, in this regard, is to construct a theoretical framework that is able to grasp the societal, in the sense of relations beyond the incidental research focus, be it households, organizations, or nation-states. To be sure, planning theory, for the last couple of decades, has borrowed extensively from sociological theory -consider the network society and the notion of complexitybut it has arguably done so in order to renew itself in the face of a crisis of spatial planning as policy. It seems to me, we could also consider planning as a social phenomenon in which sociology has, so far, shown meager interest, perhaps because the phenomenon was already claimed by planning scholars. And, so it seems to me, we could consider planning as an object for sociology, and approach the problem from this direction. 100

1.5.6 Other theories

There are other theories, within the wider sociological realm, which have had significant influence on the analyses in this book and it is important to highlight them here. Nevertheless, I have opted to focus on Luhmann's systems

⁹⁹ For example, see Chettiparamb, 2007; Van Assche & Verschraegen, 2008; Hillier, 2008.

¹⁰⁰ Luhmann, 2012a, p. 260-1.

theory as a primary framework, looking for the areas in which other theories seem or can be made compatible, and using concepts and ideas from these theories in order to make a certain twist to systems theory. In this regard, the 'systems-theoretical perspective' of this book's title refers to systems-theoretical analyses of cross-border spatial planning, in which other, poststructuralist theories have aided in bridging the gap between empirical reality and systems theory's theoretical universe.¹⁰¹

Assemblage theory is a school of thought that builds on original ideas of the philosophers Gilles Deleuze (1925-1995) and Felix Guattari (1930-1992). 102 It is built around the the notion of 'assemblage', a social constellation consisting of the materiality of concrete bodies and the reality of linguistic utterances ('a doing and saying'). According to Deleuze and Guattari, the 'assembling power' comes not from outside the assemblage but is its own. The self-organizing activity of an assemblage cannot be reduced to its elements but is based on the relations between the elements. A relation is not subordinate to the elements which it connects but it brings about something new with every connection. 103 Assemblage, as a system of ever-changing relations between elements, is not an inseperable unity with a solid order. Not the 'closed system' but the assemblage, an open combination of heteregeneous elements, gives unity to the social. Elements (or components) in an assemblage acquire meaning, depending on the relations they have to other components in the assemblage. These relations determine its meaning rather than some pregiven meaning of the involved elements determining the relations. This perspective on the social is

¹⁰¹ I am aware of the paradox in this statement, i.e. that empirical reality can only be accessed by means of distinctions made by a system, by means of theory in the case of science. Theoretically speaking, there is always a multitude of empirical realities.

¹⁰² Deleuze & Guattari, 1987.

¹⁰³ Schuilenburg, 2009, p. 206.

one of 'relations of exteriority'. ¹⁰⁴ Through the exteriority of relations, order and unity emerge as secondary properties. ¹⁰⁵ With its focus on materiality, assemblage theory has inspired my understanding of how cross-border cooperation episodes emerge and dissipate.

Actor-Network Theory¹⁰⁶ is another school of thought, related to assemblage theory, which is based on the materiality of the social. The founder and foremost thinker of actornetwork theory was Bruno Latour (1947-2022) who found, through his anthropological studies of scientists in action ¹⁰⁷, that objects, e.g. scientific artefacts, have as much 'agency' as the people working with them. As such, actor-network theory displaces agency from the individual subject onto the networks in which they are embedded. Stephan Fuchs used ideas from actor-network theory in order to construct his own theory of networks, on the basis of Luhmann's systems-theoretical notions of self-reference and autopoiesis (self-production, self-organization).¹⁰⁸ Actor-network theory and Fuchs' theory of self-referential networks have especially inspired me to find scientific explanations not in the answers of interviewees (cross-border spatial planning practitioners) but in a second- order observation of the networks they are embedded in.

Finally, Evolutionary Governance Theory (EGT)¹⁰⁹ is a theoretical framework for analyzing and explaining governance and its evolution, developed largely by Kristof Van Assche, Raoul Beunen, and Martijn Duineveld. However, many others, including myself¹¹⁰, play a role in developing this framework which builds on a broad range of theoretical sources, including

¹⁰⁴ DeLanda, 2006.

¹⁰⁵ Schuilenburg, 2009, p. 209.

¹⁰⁶ Latour, 2005.

¹⁰⁷ Latour & Woolgar, 1979; Latour, 1987.

¹⁰⁸ Fuchs, 2001a.

¹⁰⁹ Van Assche et al., 2013; Beunen et al., 2015.

¹¹⁰ Van Assche et al., 2011.

systems theory, poststructuralism, institutional economics, actor-network theory and development studies. It is an approach that addresses the complex and non-linear nature of governance. EGT is different from other theoretical approaches in the sense that it recognizes that governance and its elements are constantly changing in interplay with each other. Notions like path-dependency, co-evolution, rigidity, and flexibility are all embedded in EGT and also play an important role in this book's analyses of cross-border spatial planning.

1.6 Research questions

Faced with the bleak picture of urban development in certain border areas¹¹¹ it is understandable that public officials aspire to overcome the border by various kinds of cross-border integration work. Cross-border spatial planning in the EU was stimulated in order to compensate for the gap created by national planning systems in border areas and, indeed, even to overcome the borders of the Westphalian territorial grid. To this day, the promise of a better integration of planning policies across the border, project-wise or through strategic spatial planning, remains alluring, despite its apparent futility. There is always the hope that "this time is different" and yet it never is. We seem to be stuck with the paradox that for cross-border spatial planning to take place, borders are needed, and for it to be effective, it has to work with these borders, thereby reproducing them rather than helping to eradicate them. As a result, we keep ending up with a bordered reality. 112 In this book, I try to unfold the paradox of cross-border spatial planning by means of a systems-theoretical analysis. This entails, above all, a methodology largely based on theory construction, putting borders, regions, and spatial planning into one consistent conceptual framework.

¹¹¹ Most notably, the area in which we conducted much fieldwork, Heerlen-Aachen, where population decline is a major issue.

¹¹² Also see Paasi & Zimmerbauer, 2016.

Adopting systems theory¹¹³ we get a constructivist¹¹⁴ framework for analysis which is at the same time a positive 'super theory' that builds, on its basic constructivist concepts, a theory of world society, with consequences for planning (steering), regionalism, borders and boundaries. I wish to contribute to a tradition in social science which sees benefits in the construction of theory, that is, universal theory, which makes possible comparison from case to case and across the social-scientific disciplines, and I believe that Luhmann's systems theory is able integrate border studies and spatial planning or governance studies—fields which usually diverge in their use of analytical concepts. The following questions, to be treated respectively in Chapters 3 to 6, are formulated on the basis of this ambition.

1. In what way do borders enable and hinder actual attempts at cross-border spatial planning?

The first question deals with the distinction of success/failure and tries to grasp the rigidity of borders and boundaries. It will be answered by means of a case study of cross-border spatial planning and development, particularly highlighting the role of the EU. See Chapter 3.

2. How can borders and boundaries be conceptualized within systems theory and how do they influence society (the social) and vice versa?

The second question is highly theoretically motivated and deals with what is 'social' versus what is 'physical', with various types of boundaries and how they can be conceptually distinguished, and tries to grasp the distinction between system and environment both in social as well as physical terms. See Chapter 4.

¹¹³ Luhmann, 1995; 2012; 2013.

¹¹⁴ According to Luhmann, his systems theory is radically constructivist, as it is perfectly able to deal with the paradox of its own constructedness. See, for example, Moeller, 2012.

- 3. How can (cross-border) regions be conceptualized within systems theory and how do they enable political engagement (i.e. public policy, spatial planning, the (democratic) engagement of citizens)?

 This third question is about the phenomenon of cross-border regions, such as Euroregions, and considers them from the point of view of 'self-organization', a particular understanding of systems theory's concept of autopoiesis. See Chapter 5.
- 4. How can spatial planning be conceptualized within systems theory and what does this mean for the integration of different planning 'systems'?

 Answering of the fourth question especially requires treating various building blocks, among which are planning's world societal context, the organizations that make up planning, and the limits of planning as steering. Here, I build on the earlier chapters and on work of others on these topics and try to come to a synthesis. See Chapter 6.

1.7 Structure of the book

The core of this book is formed by four articles, published between 2013 and 2016, in peer-reviewed geography and planning journals. This somewhat complicates a synthesis into one coherent narrative. As a result of differing debates and orientations among the journals, the articles are framed differently, deal with different conceptual challenges, and are positioned differently vis-à-vis the relevant disciplines. Nonetheless, there is a binding thread running through them, and I will here attempt to recollect the connecting logic.

The first article (Chapter 3) which deals with the failed development of a cross-border business park, is the only one presenting a case study. For this reason, I have chosen to position it at the beginning of the book, where it can aid in a further definition of the problem, to put it in technical terms.

It sketches a history of plans, contacts, investments, and wider developments in the European context, in order to illustrate a typical case of cross-border spatial planning, and its problems. At the same time, this article ventures a bit further, as it also wants to explain why the business park failed, beyond the commonsense explanations given by participants. It finds this explanation in the developments on the European horizon, that is, the demise of borders, walls, and fences, and the, now somewhat more precarious, project of European integration. Once again, spatial development in border areas seems obeyingly well-nested in the tree that is called the European Union. At this moment, however, the reader should not attach too much importance to this grand conclusion, because the structure of this book requires this chapter to set the stage for a theoretical endeavor that will substructure this conclusion further in the key part of the book.

In order to make the step from case to general theory, the following chapters have been positioned consequently to answer our research questions, which will be treated step-wise in Chapters 4, 5, and 6. I will attempt to deal both with the object under observation as well as the observation itself, that is, the methodological dimension of this study. My choice for systems theory entails the convolution of theory and methodology, in the sense that methods are perhaps a topic to think about, when embarking on fieldwork, but are to some degree arbitrary, as they have to follow from pragmatic considerations in the course of research, whereas the theory directly implies the form of analysis. However, I do need to explain the general approach, the analytical strategy, that follows from systems theory as a universal but also radically constructivist¹¹⁵ theory of the social. This is the position that I hope to make clear in Chapter 2.

Chapters 4, 5, and 6 together form the core outcome of this research. In three steps, they unfold the paradox of cross-border spatial planning. To begin with, in Chapter 4,

¹¹⁵ Moeller, 2012.

I will revisit the debate on border theory, working out a conceptual framework that both extends systems theory and designs border concepts that are compatible with it, and universal in their application to the diverse topics that scholars are currently engaged in. In Chapter 5, the new concepts of border and boundary are used to scrutinize regionalism and, more specifically, cross-border 'Euregionalism'. That is, not just to criticize it, as many have done, but to understand its functioning, which includes successes, failures, and the self-perceptions thereof. In order to conduct such an analysis, let us say, at such an applied level, we introduce the concept of self-organization. The concept aligns well with the theory of social systems but bridges theory and case observations more easily. Finally, in Chapter 6, I will return to spatial planning, and argue, on the basis of the specific conditions of border regions, for a new systems-theoretical sociology of planning as a contribution to social science. I hope, however, that not only might such a new perspective be useful for studying cross-border cases but also for planning in general.

In the overall conclusion (see Chapter 7), I will reflect on the necessary selectivity and blind spots inherent to this research project, referring both to a selectivity in time as well as a selectivity arising from making these distinctions and not others. As the attentive reader might have noticed, the bulk of fieldwork for this project has taken place in the years 2009 to 2013. I would like to reflect on why this research's outcomes are still relevant in today's world.

Introduction

CHAPTER 2 **Analytical strategy**

"Explaining each other scientifically is not the road to love and intimacy."

Stephan Fuchs in Against Essentialism 116

2.1 Second-order observation

There is a paradox inherent to cross-border cooperation, including cross-border spatial planning, which is that it requires the existing borders to be effective, it has to work with these borders, thereby reproducing them rather than helping to eradicate them. Such is known already from a wider body of literature. 117 In this book, I consider this paradox not as an outcome of the research, but as a starting point. Paradoxes, when uncovered, are not mere wrongdoers or fallacies. Rather, they are productive, foundational elements, which enable particular processes of communication and action. 118 The paradox of cross-border spatial planning, in other words, is productive but, at the same time, it is fragile, depending for its existence on the occurrence of highly improbable conditions that sustain it. This is the perspective that can be gained in various constructivist approaches to which I subscribe. The analysis, therefore, entails the unfolding of the cross-border spatial planning paradox, enabling us to observe the structural conditions explaining the, often peculiar, nature and outcomes of social processes, especially in governance and public policy.

In wanting to unfold the paradox, that is, to uncover the blind spots of planning practitioners, I might get into trouble. The crux of such an approach, namely, is that it doesn't work with the concepts used by the planning practitioners but, conversely, with concepts that 'deconstruct' those concepts. Stephan Fuchs demonstrates this brilliantly in his book *Against Essentialism*¹¹⁹ with such one-liners as "explaining each other scientifically is not the road to love and intimacy" (quoted above). Based on Niklas Luhmann's theory of observers, what Fuchs explains is that different observers, for example, science, politics, or planning, maintain different

¹¹⁷ See, for example, Paasi & Zimmerbauer, 2016, p. 76.

¹¹⁸ King & Thornhill, 2003, p. 23.

¹¹⁹ Fuchs, 2001a.

frames and distinctions for observing the world, and due to this, they perceive their own observations as real and those of other observers as contingent or even, in the case of constructivist science, *constructed*. Following Luhmann, he therefore notes that constructivist science has to accept the paradox that it is itself also constructed. In what we can say about the world, we cannot avoid the paradox involved in drawing distinctions. The reason that constructivist science, the unfolding of paradoxes, might easily insult its object of study, is that its object of study (e.g. planning practice) hides the paradox on which its doings and sayings are based. It genuinely believes in what it is doing and is not helped by learning that it all is based on a paradox.

The basic approach taken in this project stems from the theoretical framework it subscribes to, which is the 'new' systems theory, developed by Niklas Luhmann and others. Particular applications of this theory are available in border studies and planning theory. Luhmannian systems theory entails a radically constructivist approach to sociological analysis, which means that it, in the first place, asks about how social truths, knowledges, and understandings have come to be constructed and, in the second place, acknowledges itself to be construction as well. In other words, there is no privileged point of observation outside society. Scientific observations are part of society and offer a particular perspective next to other perspectives.

Following a Luhmannian framework, sociology, and the social sciences in general, entail the observation of observations or, in other words, they constitute second-order

¹²⁰ Seidl, 2005; Luhmann, 1995; 2012; 2013.

 $^{^{121}}$ E.g. Luhmann, 1982; Kratochwil, 1986; Schack, 2000; Kessler & Helmig, 2007; Jacobs & Van Assche, 2014.

¹²² E.g. Beck, 1986; Luhmann, 1997c; Van Assche & Verschraegen, 2008; Jacobs, 2016.

¹²³ Also see Von Glasersfeld, 1994; Moeller, 2010.

¹²⁴ Luhmann, 1990c.

observations.¹²⁵ In the case of spatial planning, therefore, scientific analysis inquires about how planners observe their object —why they observe it in particular ways and with what consequences. Subsequently, to understand the consequences of planners' particular ways of observation, we also need to observe the environment of planning. That is, we need to observe other social systems, which are the recipients or instigators of spatial planning, and which observe in their own, unique but different, ways, necessitating translations between these different spheres. This strategy is not without consequences for the observed system. "As a technique of scientific observation and analysis, [it] allows its object to appear more complex than it is for itself. In this sense it overburdens its object's self-referential order. It undermines its object's intuitive evidences. It irritates, unsettles, disturbs, and possibly destroys, if the natural lethargy of its object does not adequately protect it". 126

To be sure, according to Luhmann, 'first-order' observations are simply reality to the observer who observes. Second-order observations problematize first-order observations in order to reveal them as contingent constructions. One could also call this the de-ontoligization of first-order observations.¹²⁷ For instance, taking the issue of population decline in border areas, one may observe the observations of spatial planners, such as that population decline poses a threat to an economically and socially livable environment, therefore legitimizing interventions and, finally, arriving at very particular interventions, like building neighborhood centers to facilitate citizens' wishes of self-organization. This sequence of observations that, in itself, appears as a logical chain, in effect entails the making of a selection at every separate statement: the selection, and thus social construction, of something as a problem, the selection of roles in a strategy

¹²⁵ Braeckman, 1996.

¹²⁶ Luhmann, 1995, p. 56.

¹²⁷ Andersen, 2003.

for solving that problem, and a selection of specific solutions. Where this appears as a 'normal' way of seeing things by planners (first-order observation), second-order observation shows the selections and can compare it to alternative selections. Like in a discourse analysis based on Foucault, this forms the basis of systems-theoretical analysis.

Following the above, we can say that my analytical strategy entails the re-description of first-order realities by means of second-order observations, using a different set of distinctions to generate those observations. In this section of the book, before proceeding with the analysis, it is therefore necessary to outline these distinctions and the most important concepts that guide the analysis. The term 'analytical strategy', which I prefer over 'methodology', is borrowed from Andersen¹²⁹ to denote "how the epistemologist will construct the observations of others —organizations or systems— to be the object of his own observations in order to describe the space from which he describes". So indeed, this entails that a particular 'ontology' enables certain methods and procedures whilst making others less favorable. The crux is, therefore, reflexivity in terms of distinctions, which form the basis of any observation, first-order as well as second-order. 130

2.2 Methodological concepts

The methodology that is second-order observation from the perspective of systems theory, is always based on the distinction between system and environment.¹³¹ All observations, first-as well as second-order, are the observations a system makes of *its* environment. This is the distinction that allows us to

¹²⁸ Sharp & Richardson, 2001; Foucault, 2002.

¹²⁹ Andersen, 2003, p. XIII.

¹³⁰ For a concise explanation of the role of distinction and indication in observation, see Fuchs, 2004.

¹³¹ Braeckman, 1996.

indicate systems, for instance, the planning system, vis-a-vis their environments, that is, whatever these systems are observing in their turn. The distinction between system and environment enables us to discuss the differences between observing systems, and helps us trying to explain the consequences of various ways of observing, of understanding, and misunderstanding.

In addition to the distinction of system/environment, which is at the basis of our observing, many more concepts feature in my analytical framework. They will be outlined in the following chapters. However, considering the abovementioned reciprocity of the analysis of the object and holding our analytical framework to be valid for ourselves as well, I would like to discuss two concepts relevant to methodology. They are relevant here in the sense that they highlight aspects of legitimacy for this research project in the context of science and/or specific scientific disciplines. I am not referring to the discussion on method, i.e. that whether or not something is scientific depends on it being based on scientific method. 132 Rather, I am referring to operational mechanisms at work both in the object of a sociological analysis as well as in sociology itself (or social science in general), explaining how something manages to stay on the inside of the boundaries of those respective systems, that is, how it manages to be, for example, cross-border cooperation or spatial planning research. To be sure, one can hardly write a novel about a family tragedy and be part of spatial planning at the same time. The concepts I would like to discuss with regard to our analytical strategy are 1) self-organization and 2) systemic embedding, using them to observe myself as a scientist in action.¹³³

¹³² Feyerabend, 2010.

¹³³ Cf. Latour, 1987.

2.2.1 Self-organization

The concept of self-organization¹³⁴ describes the process in which social systems, consisting of self-referential communication, constitute the social and material world in ways specific to each system, with real consequences to that world. For example, a conceptualization of state borders as people containers may lead to the construction of fences -whilst other scenarios may also be possible. Spatial planning processes are understood as instances of self-organization, which cast physical space in a particular light so as to steer toward a desired spatial organization.¹³⁵ This is not self-organization in the sense of inhabitants attempting to plan and develop their own neighborhood. Rather, the term 'self' is added in order to stress the self-referentiality of organization(s). Being a member of an organization and getting accustomed to its organizational rationalities, means that one can sense-fully partake in its communications, whereas an outsider could not or, at least, would make many misinterpretations. 136

Arguably, there are varying degrees of engaging materiality in the self-organization of a system. First, and to stick with the planning example, self-organization means that specific roles are attributed to officials involved in the process, one requires a physical setting, for instance a design studio, meeting rooms, and possibly arrangements for public participation. Also, one needs materials, like computers, drawing paper, and pencils, or a laptop and beamer. The moments at which particular elements become active —or redundant— is bound to vary throughout the evolution of the system. Second, there might be representations —maps, charts, plans— of physical space, which, especially in cases where they play a role in steering, make claims in that space. Beforehand, however, it is difficult to say if such representation and

¹³⁴ Noe & Alroe, 2006.

¹³⁵ Luhmann, 1997c.

¹³⁶ Also see Fuchs, 2001a.

¹³⁷ Cf. Van Assche, Beunen & Duineveld, 2013.

claim-making will have an actual impact.¹³⁸ Therefore, the social system, in its process of self-organization, can be expected to include elements of representation, means of referring to space in a system-specific way, but actual entanglements with physical space, beyond its direct materiality described above, will be less probable.

Self-organization in research is precisely methodology, not only in terms of the choice of methods but also in terms of the external aspects of the research design -however implicit the design. It is here that I want to discuss the issue of fieldwork and writing. There is a long tradition of doing case study in planning. One has to choose among various modes of involvement in a case, from 'going native' to doing selective interviewing with participants. Even just reading (studying) the textual, cartographic, and other visual products of spatial planning, in some circles, counts for case study. I would argue that this choice, at best, is based on what the researcher feels most comfortable with and is further given in by circumstances. 139 It is not, in my view, where the problem lies. The problem lies wholly, if you will, on the writing side of the research, and this is usually not treated under the label of 'methodology'. The concept of self-organization widens the scope of research design to include writing. There can be no question of scientific research, if observations from the fieldwork aren't written up in some way acceptable to our scientific peers. We are suddenly confronted with the context of a self-organizing (sub-) system of science. The translation of what we saw in 'the field' to what we can write about it in our scientific community comes to the fore.

Spatial planning, as argued by myself and others¹⁴⁰ has a particularly problematic legacy with respect to writing science. The vocabulary of academic planning hasn't been

¹³⁸ Jacobs & Varró, 2014.

 $^{^{\}rm 139}$ Methodological pluralism as in Feyerabend, 2010.

 $^{^{140}}$ Jacobs, 2010; Davoudi & Pendlebury, 2010; Van Assche & Verschraegen, 2008.

that much different from planning practice. Indeed, it has often been the explicit aim of academic planning to develop the concepts to be used by planning practice or, conversely, to learn from 'best practices' with academic planning in the position to generalize and disseminate the success factors to other contexts. Even though nowadays, in planning theory, we encounter more outer-worldly concepts than ever before, 141 there is still an indestructible urge to project all this onto the constructive transformation of planning practice. Whilst, on first sight, this seems noble enough, on the second, I wonder what is the scientific knowledge we gain from this. In short, academic planning has a difficult time making the move to second-order observation and staying there.

We can only solve this problem by distinguishing between system references. We need to make conceptually clear what is first-order observation in planning practice, and what is first-order observation in social science, and for that we need a second-order perspective which identifies this difference. Incidentally, in systems theory, we use the same distinctions at the level of first-order and second-order observation, both for self-observation as well as the observation of other systems. The distinction makes a re-entry into what is being distinguished. To try and put things a bit less abstract, what we observe is 1) how (with what distinctions) the planning system observes its environment, and 2) how planning research (the scientific system) observes the planning system. And this shows a difference between the two.

All this switching between orders of observation is not without consequences. For example, an in-depth case study with participant observation or participatory research yields detailed information, things we wouldn't know from a glance reading of the surface of operational planning, and this certainly holds true for the public at large. A researcher might

¹⁴¹ Consider the relationalism of Boelens, 2010, the complexity of de Roo, or the strategic navigation across multiple planes of Hillier, 2011.

¹⁴² Luhmann, 1995; 2006.

be tempted to adopt the perspective of the participants of the planning system. If no distinction is made at the conceptual level, it will be hard to go beyond internal planning evaluation research, just called external because the researcher is an outsider brought in. Therefore, we need to make the distinction between orders of observation and system references. We can accordingly denote what is said in interviews and written in policy and evaluation reports as self-description of the planning system. And as you can see, with the concept of self-description are already switching to the science perspective.

2.2.2 Systemic embedding

Even though the concept of systemic embedding is not explicitly discussed in the following four chapters, I want to highlight it because it has methodological relevance and explains the necessary scope of analysis. The concept is introduced in order to cast a light on the impact observing and observed systems have and the difference they make to their environments. When one can inquire about the impact of cross-border spatial planning, why not pose the same question to the inquirer? When doing a research project, especially in case the research object is political, one is apt to demand societal relevance, by which might be meant instrumental contributions to felt political challenges, policy recommendations, and the like. We want to avoid such de-differentiation of science and politics, because the idea that this is feasible, is based on a misunderstanding of a structural coupling between the two, where there is none. An analysis of the societal context in which, for instance, spatial planning finds itself, shows impact-full planning projects to be embedded in networks of legal, economic, and political organization rather than in science. The systemic embedding of a research project, in other words, lies elsewhere, and probably making a difference within science is a more feasible target.

¹⁴³ Luhmann, 2013.

When considering the systemic embedding of spatial planning as (self-) organization, we are interested in what impact it has in other spheres of society, most notably the economy, the legal system, and the political system. 144 Often, spatial planning will be aimed at some degree of economic development and, therefore, needs to produce the plans and policies that trigger businesses to make certain investments. As for the legal system, plans and policies require some legal robustness, that is, their embedding in existing legal frameworks helps, to some extent, to secure their impact. In addition, the contents of a plan need to be in line with laws in other areas, such as environmental protection. If, for instance, one plans development in a rural area which is also the habitat of some endangered animal species, plan realization may be severely jeopardized. This example also illustrates what may happen in cross-border settings, where sometimes different laws exist on either sides of the border. Finally, political embedding is important for successful planning projects and processes. In cross-border cases, this means that one needs political support on both sides of a border, and in all the relevant registers, such as levels of administration. To be sure, political embedding is clearly linked to legal embedding, as decision-making power is restricted by what is legally possible. To put it differently, having the (moral) support for cross-border spatial planning from higher level politicians is not yet the same as having the capacity for actually being able to influence political-legal decision-making.

In addition to these rather obvious spheres —the economy, law, and politics—in which planning needs embedding, there is a whole world of less tangible societal realities in which some embedding might also help. For reasons of simplification, we might call these realities 'cultural' but, often, they are very specific factors which resulted from a regional, historical context —often an intertwining of economic, political, and legal factors. In cross-border areas, for example, language

¹⁴⁴ Luhmann, 2013.

may be among these. Not speaking the language, may inhibit people from crossing the border, businesses from investing across the border, or politicians to meaningfully cooperate with their colleagues on the other side. Similarly, nationally or regionally, there may be different media cultures. What is seen as newsworthy in one place, may not even be recognized in another. There are different attitudes and customs, for example in the way business is done, or in the way one respects constructed hierarchies; e.g. the relative autonomy of civil servants in the Netherlands, the importance of hierarchy in Germany —with all sorts of regional variations. Embedding of any spatial planning process in these informal (sometimes also formalized) realities is indispensable.

To recapitulate, by means of the concept of 'self-organization', we attempt to understand the internal operations of (crossborder) spatial planning projects and processes, and the ways in which these entail specific materialities.¹⁴⁵ Similarly, self-organization comes to bear on the work of the researcher, who has to deal with grants and approvals, mechanisms of peer review, tutor- and supervisor-ship, and ways of engaging with the field. 146 One cannot do this in isolation of the (sub-) system that one wants to participate in. The concept of 'systemic embedding', on the other hand, is brought in to shed light on the societal environment of such processes, that is, on the success and failure of planning as understood from its degree of embedding in the existing formal institutional arrangements and informal rules and customs. 147 For research, this means one cannot isolate planning as a research object. It is necessary to analyze the societal context, with a clear idea of how society can be a system, what are sub-systems in society, and what is the role of system boundaries, i.e. how can one system impact upon another. 148

¹⁴⁵ Cf. Jacobs & Varró, 2014.

¹⁴⁶ Latour, 1987; 2005.

¹⁴⁷ Cf. Jacobs & Van Assche, 2014; Van Assche et al., 2011.

¹⁴⁸ Also see Van Assche, 2007, for a conceptualization of planning and context.

From this theoretical preview on spatial planning as embedded self-organization, we may already infer that a doubling of societal realities in cross-border areas makes successful cross-border spatial planning very unlikely. Nonetheless, it is attempted over and again. In the following four chapters, therefore, we allow systems theory to shed a light on the phenomena in question and come up with more in-depth insights why cross-border spatial planning persistently fails in its encounter with borders, regions, and itself.

2.3 In terms of method

2.3.1 Data collection

Following the move to second-order observation on the basis of systems-theoretical distinctions, and considering the above reflections on self-organization and systemic embedding, there can be no recourse to the application of predetermined methods. The 'scientific method' *is* second-order observation. However, this study is of course based on going back and forth between fieldwork and theory. Methods were a part of this. Moreover, the theoretical framework presented in Chapter 6 was still in a stage of becoming when I started my fieldwork back in 2009. A degree of theoretical pluralism¹⁴⁹ has always played a role in my observations. In the end, it's the emerging theoretical framework which drives the representation of the analysis in writing.

In terms of method, I applied broadly three approaches. Firstly, a type of *action research*, ¹⁵⁰ in which various activities were organized and/or attended by myself in varying collaboration with other researchers, including the co-authors of chapters (peer reviewed articles) 3, 4, and 5. Among these activities were 1) an international two day research seminar

¹⁴⁹ Feyerabend, 1999.

¹⁵⁰ Noffke & Somekh in Somekh & Lewin, 2005 (pp 89-96).

on cross-border cooperation¹⁵¹, 2) periodical meetings with public officials from Dutch border municipalities, sharing and discussing research findings¹⁵², 3) a conference for public officials on cross-border cooperation organized by the Euregio, 4) a spatial planning and design workshop for master students on the topic of Avantis¹⁵³, and 5) a design atelier about border landscapes¹⁵⁴. Being both participant as well as observer, I switched constantly between first- and second-order observation, making these activities into a rich pool of 'data' for scientific analysis.

Secondly, I conducted a *discourse analysis*¹⁵⁵ of policy documents, (news) media sources, and academic writings on cross-border cooperation and spatial planning insofar as these communicative utterances could be considered representing being part of the life world of its topic of interest and therefore first-order observations. This also applied to the products of some of the activities mentioned above. The discourse analysis was aimed at finding out what distinctions, including hidden assumptions, drove communication, and, in the course of this research project, I increasingly focused on distinguishing between organizational and function-systemic discourse. In other words, induction and deduction, moving between theory and practice, was almost always the case.

This took place in Maastricht and involved academics holding seminars and interactive sessions with an international group of (Erasmus exchange) students.

My research and that of Mariska van der Giessen (2014) were partly funded by the municipalities of Nijmegen, Hengelo, Maastricht, and Heerlen. At these meetings, scientific problems could be mirrored by political problems.

 $^{^{153}}$ This workshop was organized by Henk-Jan Kooij and myself and held for honours students at the University of Münster.

The design atelier was held during four months as a course for master students of landscape architure at Wageningn University. I participated in this course as a supervisor.

¹⁵⁵ Gee, 2001; and especially Jensen & Richardson, 2004.

As a third approach in terms of method, we regularly undertook *open-ended interviewing*, ¹⁵⁶ where we tried to speak with representatives of as many as possible public and private organizations involved in cross-border spatial planning as possible. ¹⁵⁷ Broadly, this implies provinces, municipalities, regional organizations, consultancy firms, and involved academics. In a side project, active citizens in the Nijmegen-Kleve border region were interviewed by master student Anna-Lena Hoh, whom I supervised, the results of which also contributed to the overall picture of cross-border 'governance' and cooperation. Qualitative, open-ended interviewing as a method, in the end, is always followed by some sort of scientific analyis, and this is where we moved back to discourse analysis, i.e. the second-order observation of our interviewees' discourse.

2.3.2 (Problems of) operationalization

This thesis is not the result of a precise formulation and rigid roll-out of a research proposal. Rather, it is a synthesis of four published papers, which stand on their own. The writing of these papers had been possible only on the condition of having no cut between designing the theoretical framework and doing the fieldwork and, therefore, on the condition of pursuing an open kind of inquiry, which welcomed intuitively delimiting the information intake. What is more, the empirical information formative to the theoretical chapters in this book, is not restricted by the 2009-2013 research project, but also covers research experiences on other occassions. An important example is the project on American-Indian reservations (2006-2007), where borders can become highly contested, as boundaries of states. counties and reservations may overlap, leading to problems of jurisdiction and sovereignty. Another major learning

¹⁵⁶ In the sense of Creswell (2003, pp. 19-21) with an eye on establishing the meaning of a phenomenon from the views of participants.

 $^{^{157}\;}$ A list of interviews is provided as Appendix 1.

experience was a research project in the Danube Delta (2010-2011), where boundaries, even though precisely delineated on maps, appear more diffuse in reality, with consequences for the ways in which people make us of the landscape and the way the area is governed.

In the case of this thesis, we are dealing with research questions formulated *ex ante*, that is, long after concluding the fieldwork (data collection) for this study, and mainly with an eye on logically structuring the book. This approach is therefore much different from structured or survey-based inquiry, which is grounded directly in research questions developed beforehand. Instead, interviews were aimed predominantly at finding out *as much as possible* about the reality of cross-border spatial planning. Questioning relied on topical desk research –knowing a little bit about the respondent's involvement beforehand– learning about cross-relations with other respondents and with formal arrangements, how respondents operate and what their opinions are, having an open and adaptable attitude and being attentive to unexpected information.

Even in the case of enduring research questions, formulated before the start of enquiry and upheld in the written thesis, there is an obstacle inherent to second-order observation. A direct inquiry structured around categories from the theoretical framework is not possible, because a systemstheoretical analysis entails the redescription of first-order observations, during which a completely different observation emerges, which is neither familiar to the study object nor uses a familiar terminology. But there are dimensions of the evolutionary process of autopoietic social systems which can be enquired about. For example, emergence and longevity, conditions of sustenance, self-/other-reference and structural coupling. These can be enquired about in general terms of when certain planning projects and/or organizations have emerged, how and how long they are sustained by what means, how participants describe them and the relevant institutions on the outside with which there are dependices. In the

course of arriving at the evolutionary model of autopoietic social systems, such dimensions have become more explicitly operational in the interviewing.

In emphasis of the above, the interviews took place largely before the emergence of the theoretical framework, which was maybe partly there implicitly. A complete picture of the theoretical framework had required a lot more reading and thinking about the various sociological angles. A direct operationalization beforehand of theoretical categories to guide fieldwork inquiry is therefore hindered. Instead, transcripts of interviews, documents and observations were used retroactively to arrive at theoretical conclusions. 158 The data itself functions as an unstructured archive to be consulted from different angles depending on the interest that emerges around a particular paper -in this case the chapters of this book. I would describe this analysis and writing strategy as a kind of triangulation exercise that harbors the intuition vis-à-vis, on the one hand, all data, that is the totality of fieldwork impressions, and, on the other, the emerging knowledgeability on my part of sociological theory, in a broad sense.

 $^{^{158}\,}$ Similar to Charmaz (2006) which outlines a constructivist approach to grounded theory.

Analytical strategy

CHAPTER 3

Fading EUphoria at the Dutch-German border

"Investigations that are inspired theoretically can always be accused of a lack of 'practical relevance'. They do not provide prescriptions for others to use. They observe practice and occasionally ask what is to be gained by making such a hasty use of incomplete ideas."

Niklas Luhmann in Ecological Communication 159

This chapter contains an article published earlier in the peer-reviewed *Journal of Economic and Social Geography*. ¹⁶⁰ It is based on an in-depth case study, undertaken in collaboration with Henk-Jan Kooij, of a particular episode of cross-border spatial planning, which clearly went beyond the more usual discourse at the strategic level. The intention is to provide the reader with an example of how cross-border spatial planning at the strategic level can result in or give impetus to concrete site planning activities and answer this book's first research question: in what way do borders enable and hinder actual attempts at cross-border spatial planning?

3.1 Introduction

Right on top of a southern stretch of the Dutch-German border, a 100 ha. business estate pops into view which, seen from the air, is shaped like a giant key, a key towards a borderless Europe. What can also be seen from the air is that most of these 100 ha. are still greenfields rather than office buildings. As of yet, Avantis has not become the European Business and Science Park that public officials had in mind during its inception in the 1990s but, rather, remains a park for walking the dog – one of the most expensive parks to do so, however. What went wrong?

There are several conventional explanations which apply to the failure of this project: time catching up with plans, differing interests of the stakeholders, and events thwarting implementation, to name but a few. These explanations are paramount in the self-interpretation of the parties involved, but are rather fragmented. Alternatively, the explanation presented in this article is 'EUphoria'. 161 a temporary condition

¹⁶⁰ Jacobs & Kooij, 2013.

¹⁶¹ The similar notion of 'europhoria' has been coined earlier (Hospers & Groenendijk in Prinz et al., 2003) to refer to initial enthusiasm accompanying the introduction of the new European currency EURO, which was the successor of the virtual ECU.

that produced a favorable climate for cross-border policymaking and development in the context of European integration. In what follows, we will reconstruct the history of Avantis from the perspective of EUphoria and unmask the project's EUtopian dimensions that had been there from the beginning.

Our reconstruction and findings are based on a case study covering a series of policy documents and consultancy reports of government agencies (referred to in the article) in the Heerlen-Aachen cross-border area, and supplemented by a series of 18 interviews with public officials of both German and Dutch affiliation. The approach that underlies this case study is a discourse analysis following Jensen and Richardson, 162 which is focused on identifying policy discourses as consisting of linguistic as well as socio-spatial or material dimensions and thus embodying a conceptualization of discourse as more than linguistic. For an analysis of spatial planning and development, this is important because each discourse 'frames' or constructs space in a specific way and according to specific logics, which may be potentially at odds with alternative understandings of space, where space itself plays a crucial role in enabling and restraining a policy discourse. The framing of space may pertain to the way a region is understood from its past events, the way its present problems are framed or ignored, as well as to the way a region should develop in the future. 163 As this case study focuses largely on the emergence of a discourse on cross-border regional development¹⁶⁴ and investments of public money towards and in legitimization of that end, we adopt this discourseanalytical approach to uncover the way in which the discourse gained influence, persuasion, and became takenfor-granted.¹⁶⁵

¹⁶² Jensen & Richardson, 2004, pp. 44-66.

¹⁶³ Cf. Kooij et al., 2014.

¹⁶⁴ Also see Jacobs, 2012.

¹⁶⁵ Cf. Jensen & Richardson, 2004, p. 56.

Even though in this text we focus mostly on the specific history of the Avantis cross-border business estate and try to explain its peculiar unsuccessfulness, the use of the lens of discourse analysis inevitably brings us to consider the relevance of the wider context of cross-border cooperation as part of European integration. The European integration discourse, which is related to the construction of EU regional policy, off and on seems to frame regional processes of cross-border cooperation. Again, we stress the importance of a discourse-analytical approach that takes material and social-spatial dimensions into account, for the European integration discourse is fueled by the structural funds - a material dimension - and this undeniably plays a role in cross-border cooperation projects. We therefore highlight the emergence of cross-border regions and the funding schemes for cross-border cooperation in order to understand the implications of EUphoria.

3.2 EUphoria

The story of Avantis goes back to the early 1990s, a time which we will characterize by using the notion of EUphoria, the commonly felt expectation of intensified European integration after such major events as the fall of the Berlin Wall and a series of treaties signed to foster cross-border cooperation and overcome the internal borders within the territory of the European Community's member states. Obviously, EUphoria is not the only explanation for the failure of Avantis – consider, for example, environmental issues, changes in the economic situation, and delays in construction – but we think that the concept of EUphoria offers a more substantial explanation, and makes our analysis relevant to the wider context of cross-border cooperation.

EUphoria characterizes the *Zeitgeist* of a shared optimism towards a borderless Europe, spurring the emergence of cross-border cooperation projects that would today be seen as overambitious. Indeed, whereas much cross-border cooperation today has a more incidental, pragmatic, and deliberative character, the 1990s saw a host of proposals for physical intervention in the borderlands, that is, strategic visions or development plans. What presently goes under the name of Avantis is one such proposal that was actually realized on the Dutch-German border between the Dutch city of Heerlen and the German city of Aachen.

From the perspective of cross-border cooperation, one point in history cannot be overemphasized, namely the demise of the Iron Curtain in 1989. With all its symbolic value, the demise of the Iron Curtain and, most obviously, the fall of the Berlin Wall, produced a general optimism towards the disappearance of (European) borders. As indicated earlier, the expectation was commonly felt that the European Community would continue expansion and, above all, integration. At the end of the Cold War this was also the time when the ongoing construction of the European Union was globally viewed as an innovative model for peaceful integration of the economic and political systems, indeed as a novel civilian power. 169

Treaties and new policy arrangements played a strong role in the EUphoria of the 1990s. The Schengen Treaty, which was originally signed in 1985 between a small number of countries, following the events of 1989, was successively upgraded in 1993 to become a near to EU-wide agreement shaping the internal market. The introduction of European funding for cross-border cooperation (Interreg) in 1990 came at a perfect moment because of the general optimism concerning the EU and the disappearance of borders – what

¹⁶⁷ Jacobs & Varró, 2011.

¹⁶⁸ Christiansen & Jørgensen, 2000; Wilson & Donnan, 1998.

¹⁶⁹ Nicolaïdis & Howse, 2002; Rifkin 2004.

we have named EUphoria. This funding scheme quickly became the catalyst for cross-border cooperation projects. ¹⁷⁰ Avantis was not the only project that so explicitly focused on the border. For example, the twin towns of Kerkrade (the Netherlands) and Herzogenrath (Germany), at a stone's throw away from Avantis, teamed up to form the European town of 'Eurode', epitomized by the symbolic removal in 1993 of the stone barrier in the middle of the Nieuwstraat/Neustrasse, ¹⁷¹ and underscored by the construction of the Eurode Business Center, built on top of the Dutch-German border. With only one building, arguably, it is a miniature version of Avantis.

Interreg and the emergence and shaping of EU regional policy produced a discourse that laid claim to space in the borderlands, the first step being the partition of the European territory into a series of regions, including cross-border regions.¹⁷² Some of these cross-border regions, such as the Euroregion Meuse-Rhine which covers our case, existed prior to this process¹⁷³ as a result of bottom-up developments. There was no EU financing and cross-border regions basically functioned as (informal) networks of cross-border cooperation, focusing mostly on practical problem-solving.¹⁷⁴ With the advent of support schemes in the context of EU regional policy, cross-border cooperation began to incorporate parts of that discourse on European integration that was connected to EU funding. With the conversion of the existing cross-border regions into Euroregions, that is, EU institutions dealing with the implementation of regional policy, a discourse of territorial rescaling emerged, 175 touching base with the EUphoric beliefs of the eventual disappearance of the border in policy circles. On the ground, we witnessed the emergence

¹⁷⁰ Perkmann, 2003, p. 166.

¹⁷¹ For a critical analysis, see e.g. Ehlers, 2001.

¹⁷² Cf. Perkmann, 1999.

¹⁷³ Knippenberg, 2004.

¹⁷⁴ Cf. Perkmann, 2003; Perkmann, 1999.

¹⁷⁵ E.g. Brenner, 1999; Jessop, 2003.

of cross-border regional development schemes¹⁷⁶ meant to guide the attribution of the regional funds, and spurred 'experiment'-like development projects, like Avantis. We argue that these developments indicate a certain belief in the 'euregional' becoming a functional and political territorial scale.¹⁷⁷ Subsequent experiences with EU funding indicate a degree of over-enthusiasm but we will first describe the developments taking place during that initial stage of Europeanization of cross-border regions and cross-border cooperation with regard to the case of Avantis.

3.3 Trial area in Borderless Europe or EUtopia?

The fertile grounds for Avantis were created during Martin Bangemann's time in office. As the EU commissioner for Internal market and Industrial affairs from 1989 to 1995, and for Industrial affairs, Information & Telecommunications Technologies from 1995 to 1999, he initiated an experiment to explore the obstacles and advantages of a cross-border business and service facility. The EU held a competition and invited six research institutes, both German and Dutch affiliated, to investigate the possibilities and obstacles. The aim was to anticipate concrete situations; for example, imagine an office on the border and the refrigerator starts dripping and the liquid runs from the Dutch side towards the German side. Which insurance company would have to pay for the damage? Thus, the idea was to set up a trial area, in which such affairs could be tested and, subsequently, the outcomes could be transferred to other cases in Europe. This project was confidential, and seems to have been carried out during the commissioner Bangemann's first term in office.

¹⁷⁶ In the Euroregion Meuse-Rhine, this was the MHAL (Maastricht/ Heerlen, Hasselt, Aachen, Liège) Spatial Development Concept of 1994 (Peters, 1994).

¹⁷⁷ Cf. Jacobs & Varró, 2011.

The actual idea of a cross-border business estate originated at the beginning of the 1990s, which resulted in a declaration of intent between the Cities of Heerlen and Aachen. The declaration of intent displayed a high level of detail concerning the size and location of the business estate. In addition, bilateral working groups were proposed to sort out the details of cross-border development in the fields of spatial planning, environment, economic affairs and real estate. The idea was to provide space for companies of regional and international significance, which use scientific services of the academy in Heerlen and the polytechnical academy RWTH (Rheinisch- Westfälische Technische Hochschule) in Aachen, and of "high tech" research institutes. Transport companies were explicitly ruled out. 179

The financing of the cross-border business estate was supposed to be contributed largely through subsidies, in particular, European subsidies, such as Interreg and EFRO. Also national financing like the Dutch programme for business environment urban junctions (bedrijfsomgeving stedelijke knooppunten), allocated 17 million guilders from 1992 to 1995. 180

Moreover, the idea was to create what was called an 'à la carte model' ('Zapfkrahnmodel' in German, 'tapkraanmodel' in Dutch), where companies located anywhere on the business estate could 'pick and mix' their laws in a way that would suit them best. For example, it would be possible for an entrepreneur to start a company, paying German taxes, but using public utilities from the Netherlands. This required enormous governmental efforts, resulting in a number of bilateral agreements between the Netherlands and the Federal Republic of Germany, such as the third supplementary protocol concerning double taxation.¹⁸¹

¹⁷⁸ Gemeente Heerlen & Stadt Aachen, 1992.

¹⁷⁹ Gemeente Heerlen & Stadt Aachen, 1992.

¹⁸⁰ Groene, 2000.

¹⁸¹ Federal Republic of Germany & United Kingdom of the Netherlands 2004 Derde Aanvullend Protocol bij de Overeenkomst van 16 juni 1959 Tussen de Bondsrepubliek Duitsland en het Koninkrijk der Nederlanden tot het Vermijden van Dubbele Belasting op het Gebied van Belastingen van het Inkomen en van het Vermogen Alsmede van Verscheidene Andere Belastingen en tot het Regelen van Andere Aangelegenheden op Belastinggebied. Kerkrade, the Netherlands.

Avantis was an ambitious project that aspired overcoming and even exploiting the border location by attracting hightech firms looking to serve two markets. As we now look back on that time and see the ambitions of the project shattered, we can hardly avoid another apt wordplay, namely EUtopia. 182 Obviously, it was known that cross-border developments would be complex, time-consuming or, perhaps, impossible but the early 1990s offered the right climate to take on the challenge under the legitimate label of a trial area. The developments at the European level seemed favorable and regional officials presented themselves as forerunners of a type of cooperation project that was considered to become normal in a further decade or two. 183

3.4 Campus Europa: the virtual laboratory of integration

Completely in line with their symbolic investment in Avantis, the parties involved tried to rub out the institutional differences between the two countries. Several working groups, both national and bi-national were initiated to coordinate between law and legislation of the two countries and the different procedures that existed on either side of the border. As a result, the zoning plan was developed according to both the German and Dutch standards, in two languages. The zoning plan was approved by the authorities in 1997. Additional studies also needed to be carried out such as the environmental impact assessment for both the German and Dutch sides, the 'Umwelverträglichkeitsstudien', the economic cost benefit study and market research.

¹⁸² The concept of EUtopia has been coined before (Nicolaïdis & Howse, 2002) but, there, refers to the idea of Europe as a civilian power which inspires thinkers and politicians globally. In that sense, it bears more comparison with the idea of the American Dream (cf. Rifkin, 2004).

¹⁸³ Cf. Christiansen & Jørgensen, 2000; Wilson & Donnan, 1998.

¹⁸⁴ Stadt Aachen et al., 1997.

Despite approval of the zoning plan, the different legal systems still made it difficult for entrepreneurs to request a building permit on the border. Therefore, a further exploration of the legal systems and its procedures was called for. Central to this exploration was the combined request for building permits, aptly called Campus Europa. 185 This was done in the case study of a virtual building on the border, in the framework of an Interreg IIIA project from 2003 until 2005. A single permit procedure was impossible, due to the fact that the Netherlands had three separate procedures at that time (Bouwaanvraag, Milieuvergunning, Gebruiksvergunning), whereas Germany had only one (Bauantrag). Thus, a combined procedure was developed by bureaucrats and officials of the Stadt Aachen, Gemeente Heerlen, Provincie Limburg, Nordrhein Westfalen, Ministerie van Economische Zaken, Interreg, Ministerie van Buitenlandse zaken, and the EU. This case, and the case of Solland Solar, a company that wanted to build their facility on both sides of the border, were processed and used for a further orchestration of the procedures. 186

With all the right legal conditions in place or otherwise sorted out, there seemed to be no reason for downgrading the ambition level. In other words, the master plan would signify a borderless business estate, that is, with eradicated institutional borders and no visible border on the premises. It was developed as one site which meant, for example, that the German side of the park could only be reached over Dutch territory, that specific spot being the entrance of the estate. From the sky, the urban plan looked like a key, symbolizing a borderless and unified Europe. The urban development plan, furthermore, provided large parcels in a green setting on the border, inspired by visits that the shareholders made to Stockley Park near London. This would create the most

 $^{^{185}}$ CAWA (eds.), n.d., Handbuch Campus Europa. Stadt Aachen & Gemeente Heerlen, Heerlen & Aachen.

¹⁸⁶ Ibid

attractive environment for large multinational businesses in the broader 'high-tech' sector. Finally, and importantly, the zoning plan managed to include a new railway connection between Heerlen and Aachen, with a regional coverage to facilitate environmentally-friendly commuting.

In sum, the whole planning process started in 1992/1993 and lasted until 1997, when the zoning plan was approved and all other studies were finished. In 1998, the public limited company GOB (grensoverschreidend bedrijventerrein Heerlen/Aachen) was established, with the Municipality of Heerlen, the City of Aachen, LIOF (Limburgse Ontwikkelings- en Investeringsmaatschappij, Limburg Development and Investment Company) and LEG Stadtentwicklung (LEG stands for Landesentwicklungsgesellschaft, Spatial Development Company) as shareholders. In 1999, the name was changed to Avantis, European Business and Science Park.

3.5 The persistent border

In 2013, only a fraction of the available parcels is occupied by firms, causing great financial losses at AVANTIS N.V. (a public limited company, plc). In the self-interpretation of the shareholders, there are several causes for the failure of Avantis but these, in our view, obscure the fact that the border marks essential difference that cannot be rubbed out by efforts on the local scale. We will review the most common explanations before returning to the issue of EUphoria and argue for a more fundamental reason underlying the failure of Avantis.

First of all, during the environmental impact assessment, three abandoned hamster holes (*Cricetus cricetus*) were found. The Badger & Tree Foundation, which was specialized in legal disputes concerning nature protection, together with a local organization, challenged AVANTIS N.V. 23 times before the Dutch Council of State (Raad van State).¹⁸⁷ Legal

¹⁸⁷ Vonk, 2001; Beunen et al., 2013, p. 283.

proceedings were successfully finished in 2003 but, according to the shareholders, the market for business parcels had dramatically declined by then. A few companies were interested in parcels but, on account of the legal proceedings, they renounced their interest. Changes in the market implied a virtual end to the demand for these large and top-end parcels.

Secondly, instead of the expected convergence of laws and procedures, some laws and procedures in fact diverged, such as the one on energy. For example, companies on Avantis at the German side are unable to obtain electricity, because the estate has a Dutch electricity connection. In addition, telecommunication was simultaneously German and Dutch on Avantis, but the OPTA (the Dutch Independent Post and Telecommunications Authority) ruled in 2003 that this was against Dutch law. And there are more problems, such as signposting and mail delivery. 188 In this respect, the à la carte model seems impossible, and will remain impossible in the near future, let alone the idea of a borderless business estate. And to the extent that there are some advantages to be gained, this proved to be possible exclusively on parcels that were located exactly on the border, leaving most part of the business estate without such advantages.

Finally, the combined zoning plan of 1997 could not be used any longer, due to national changes in legislation and procedures. So when it is even difficult to change a zoning plan in case of a purely domestic topography, changing a transnational zoning plan in order to accommodate changes in the market (in this case, an increased demand for smaller parcels) can be so time-consuming that, when done, market conditions might have changed again.

To mitigate the situation of Avantis, the Dutch tried to incorporate it as one of the focal points of their spatialeconomic policy. In several green and white papers on spatialeconomic policy of the Province of Limburg, Avantis was

¹⁸⁸ Commissie Hermans, 2007, De Toekomst van Limburg Ligt Over de Grens. De 'Euregio's als Bruggenbouwers Tussen de Lidstaten'. Provincie Limburg, Maastricht.

identified as one of the key areas for the Limburg economy, as an operating base for the promising cluster of 'new energy', instead of the envisioned theme of the declaration of intent in 1992 (i.e. 'automotiv'). Rather, an atmosphere of 'open innovation' should be created on the 'open campus AVANTIS'. In addition to 'new energy', Avantis was supposed to be the location for the cross-border European Cardiovascular Center, a joint initiative of Maastricht UMC+ (Universitair Medisch Centrum) and Klinikum Aachen.¹⁸⁹

Whereas in the Netherlands, Avantis figured as a node in a discursive policy world of clusters, campuses and the knowledge economy, focused on improving Limburg's economy, in Germany Avantis was not considered as key to their economic structure.¹⁹⁰ It is true that in the beginning of the 1990s, Aachen had a lack of space for businesses, and the development of the cross-border business estate was seen as a good solution but, for the city of Aachen, it was never part of a grand scheme to attract innovative and high-tech businesses to improve the local economy. What's more, at the beginning of the 2000s when the hamster issue was still unresolved, the RWTH Aachen decided to develop two campuses of its own for its technological spin-offs and institutes. Campus Melaten and Campus West were planned to foster space for education, research, spin-offs and businesses. These plans made it even more unlikely that spin-offs would move to Avantis.

The economic downturn and the perception that not all cross-border issues were resolved created a standstill in the issue of parcels. Due to this standstill, AVANTIS N.V. needed re-financing of 26 million euros in 2006, of 5 million euros in 2009, and another 26 million euros in 2012. These capital injections may save AVANTIS N.V. as an organization but cannot hide the divergence in national law and procedures,

 $^{^{189}\,}$ Taskforce Versnellingsagenda, 2005; Raad van advies Versnellingsagenda, 2008; Commissie Hermans, 2007.

¹⁹⁰ See Kooij et al., 2014, for an analysis of the Dutch campus discourse.

¹⁹¹ Gemeente Heerlen, 2011a; Gemeente Heerlen, 2011b.

and will preserve the uncertainty for entrepreneurs looking for business locations on the cross-border business estate.

3.6 Fading EUphoria

It is clear that subsidies from the EU made the development of Avantis possible. Without them, and without the EUphoria of the 1990s Avantis would probably not have existed in its current form. However, what had been obscured by a temporary belief in diminishing European borders, is that borders persist and need to be taken seriously. EUphoria drew attention away from the crucial differences between Germany and the Netherlands and switched it to the need and real possibility of overcoming the border. It was only when EUphoria began to fade that the persisting border differences resurfaced. EUphoria as a concept based in a discourse-analytical perspective, 192 we argue, sheds new light on general disillusionment with cross-border cooperation in the context of European integration. Obviously, standard explanations that include cultural differences, differences in rules and regulations, or differences in interests continue to be valid but the main question here is how one was able to conceive of and implement a plan that challenges these differences. Let us reconsider the case of Avantis in the light of EUphoria.

First, the concept of the cross-border business estate at a time of a belief in a borderless Europe functioned as a bridging concept between separate discourses, in this case cross-border cooperation, German spatial policy, and Dutch spatial policy. It glossed over the fact that these discourses had different origins and were coupled to different political and legal contexts. When the resulting discourse (or 'discursive configuration')¹⁹³ has sufficient means to carry on and sustain

¹⁹² Cf. Jensen & Richardson, 2004.

¹⁹³ Cf. Kooij et al., 2014.

itself, for example through European funding, through the lack of controversies, through favorable economic conditions, it has a real impact in physical space.

Second, when the situation sketched above is the case, there will be networks of public officials devoting relatively large parts of their time to participate in the cooperation discourse. With Avantis the stakeholders were in such a position. Among other things, joint visits to reference projects (e.g. Stockley Park in the UK) contributed to concretization of the common ambition. It was, so to speak, a train set in motion and almost impossible to stop. As a 'micro' discourse the participants in the project were able to develop a specific framing of borderland space¹⁹⁴ that could be temporarily sustained through the condition of EUphoria that was generally present in the political system.

Third, the master plan for Avantis was strongly dependent on expectations that were directly connected to EUphoria, which implies that it was not anchored in existing realities. We have mentioned three illustrations; 1) the key selling point of the à la carte model, where firms could pick the most favorable tax system, energy supply, etc. (either Dutch or German), 2) the attractive park environment modeled after Stockley Park, and 3) the new regional railway line making Avantis easily accessible. None of these three points have proved to be realizable: most firms would not invest on the basis of promises but rather, on the basis of guaranteed assets. Only with EUphoria, a separate policy discourse was able to emerge which took such points as almost already real, namely with reference to the ongoing process of European integration.

In line with a number of authors¹⁹⁵ we also find evidence of a general disillusionment of cross-border cooperation within the Interreg framework, and along the Dutch-German border. That is, cross-border regions in the EU have not become

¹⁹⁴ Jacobs & Varró, 2011, pp. 14-15.

¹⁹⁵ E.g. Knippenberg, 2004; Knippschild, 2011; Perkmann, 2007; Popescu, 2011; Kaucis & Sohn, 2021.

new governance levels comparable to states or sub-state provinces, regions, counties etc. What we add to this diagnosis, however, is that the policy discourse of European integration, which includes circuits of money such as Interreg funding, does impact upon local cooperation processes in the sense that it encourages public officials to be more progressive (i.e. more ambitious from a cross-border spatial development perspective) than would be advisable from the point of view of what is legally, politically, and economically feasible. The degree to which this is the case seems to have decreased (i.e. the fading of EUphoria), but we argue that the case of Avantis is a good illustration of the general argument.

Not only the stakeholders of Avantis are forced to reconsider strategies but also in the wider context of EU funded cross- border cooperation, critical self-reflection can be observed. Borders have proven to be more persistent than expected (hoped for) and subsidies do not convincingly lead to actual integration across borders. With the discussion on how or if the Interreg funding scheme should be continued after 2013 looming in the background, Euroregions and their constituents reconsider the options. One possibility is the adoption of a European Grouping of Territorial Cooperation (EGTC), a legal instrument which provides collaborating local or regional governments with a framework to formalize their cooperation. However, in the transboundary area of Heerlen-Aachen, this has led to an impasse because the benefits are not clear enough as long as one cannot agree on what tasks to endow EGTC with. The symbolic meaning of EGTC as the future of cooperation in transboundary regions is not readily accepted but, rather, its real possibilities are thoroughly evaluated before anything happens; a reality which underscores the absence of EUphoria. In the meantime, reconsidering ways in which to attribute Interreg funds, there appears to be a move towards privileging larger projects over smaller ones, with the argument of greater impact and visibility. The case of Avantis, however, may serve as a critical question mark to such a strategy.

As a final note, we would like to point to the inherent logics of the discourse on cross-border cooperation. One could see it as a relic of the 1990s' EUphoria but also accept the underlying paradox, namely that one requires a border to do cross-border cooperation. And the discursive logic is that funding of cross-border cooperation, on the condition that it is done in an effective way, leads to integration/cohesion. But, taking into account the underlying paradox, what such funding actually does is the reproduction of a border.

Fading EUphoria at the Dutch-German border

CHAPTER 4

Understanding empirical boundaries

Joren Jacobs & Kristof Van Assche

"The idea of nation obviously belongs to the set of short-lived semantics that can exercise a fascination for a transitional period without betraying what societal system they refer to.

It can therefore be assumed that this idea is now on the wane, a phase in which it does more harm than good and from a sociological point of view constitutes one of those obstacles épistémologiques [...] that for reason of past plausibilities block urgently needed insights."

Niklas Luhmann, Theory of Society, Volume 2196

This and the following two chapters each aim to develop a chunk of theory, whilst learning, in the process, something new about cross-border spatial planning. As a result of publishing in different journals, writing to different audiences, and writing with different co-authors, a glance reading of the three chapters may reveal apparent inconsistencies. As I would have it, these are rather semantic differences, or differences in the use of terminology. For example, in this chapter we are discussing the notion of 'empirical boundary' as a solution to the conceptual problem of the lack of an objective physical reality. In the following chapter, while making use of Peirce's semiotics, we present the reader with the notion of 'dynamic object'. In retrospect, we may infer that the empirical boundary is a dynamic object, an object not yet social, so it illustrates well the model of Chapter 5. This type of terminological inconsistency is, in my opinion, not to be mistaken for conceptual inconsistency.

In this chapter, which has been written in collaboration with Kristof Van Assche and published earlier in the peerreviewed journal *Geopolitcs*, ¹⁹⁷ we set out to (re-) conceptualize borders and boundaries on the basis of Niklas Luhmann's theory of social systems. We consider it necessary to endorse a set of border concepts which goes beyond a mere vocabulary. Border concepts abound in the literature, referring, for example, to the physical borderline, to distinctions in thought and communication, to a supposed nature of a border (e.g. fuzzy, penumbral, porous). Physical and mental, conceptual and political, technical and cultural; boundaries can be so much. But we are not looking for a definite typology. Rather, through systems-theoretical abstraction, that is, the reconsideration of border concepts from the perspective of social systems and their environments, we hope to sort useful from redundant concepts, adding new ones, if necessary. The research question answered in this chapter is: how can borders and boundaries be conceptualized within systems

¹⁹⁷ Jacobs & Van Assche, 2014.

theory and how do they influence society (the social) and vice versa?

4.1 Introduction

The theorization of borders and boundaries, in many recent accounts, leads to the acknowledgment of borders as fluid phenomena, as they are no longer exclusively found on the edges of states but have moved inward and outward. 198 They are characterized as a "dynamism of borders and bordering practices", 199 which gives rise to a discussion concerning the need for and possibility of a general border theory guiding future border research.²⁰⁰ The roots of contemporary border studies in 'limology' do not offer the theoretical tools needed to make sense of today's contextual borders. There is the contention that the classics of 'limology' have, in this respect, lost authority with regards to being able to offer theoretical ground for analysis, as the foundations of limology consisted of a relatively linear classification of borders into different types as well as into different degrees of openness.²⁰¹ Such a framework does not suffice in the face of the fluidity of present-day borders and, thus, this type of border theory is dropped. Nonetheless, debate in the broad field of border studies, about the way borders and boundaries should be studied has been strong during the last two decades, 202 without, however, arriving at a consensus. Rather, resulting in some debate about this issue whilst, at the same time, scholars are seen to develop 'border theory' in various

¹⁹⁸ Newman, 2006; Rumford, 2008a; Balibar, 2009; Johnson et al., 2011.

¹⁹⁹ Parker & Vaughan-Williams, 2009; also see Newman, 2011, p. 33.

²⁰⁰ Paasi, 2011, p. 27; Jones, 2009; Newman, 2006.

²⁰¹ Newman & Paasi, 1998; Van Houtum, 2005.

²⁰² David Newman notes a 'renaissance' in the study of borders. See Newman, 2011, p. 33; also see Newman, 2008; Parker, 2009; Newman, 2006; Jones, 2009.

directions, ²⁰³ sometimes as a response to this debate and, sometimes, irrespective of this debate and legitimated foremost in relation to political or 'societal' challenges. Think of the new border gates and fences, migration issues, biometric surveillance, cross-border cooperation, et cetera. ²⁰⁴ Many issues are framed seemingly within a theoretical perspective that fits only one specific issue, whilst still all deal with 'the border'. In such a way, the field of border studies becomes the hotspot for *thematic theorizing*, with a variety of theoretical approaches and insights as a result.

It is argued that, because of the contextual character of borders, such diversity is inevitable. One general border theory, from that point of view, would neither be desirable nor probably realistic.²⁰⁵ Fully acknowledging the argument of contextuality, we do argue for another direction in the theorization of borders, that is, similar to what Anssi Paasi suggested to be perhaps the only remaining way forward, "as part of a broader effort towards social-cultural theory". 206 In our view, border studies can be considered as a thematic discipline, that is, an interdisciplinary field, broadly spanning the social sciences and humanities, as far as they focus on borders as empirical phenomena. The plethora of approaches as to their origins in various social-theoretical backgrounds is therefore understandable and perhaps indeed inevitable. However, the argument that borders are always contextual does not exempt them from social-theoretical conceptualization. Rather, as far as *contextualism* can also be the starting-point of social theory, we regard it meaningful to explore avenues

²⁰³ Using such diverse notions as fuzzy, liquid, as border-*lands* rather than borders, as creative spaces, as choreography of lines, and as margins. See respectively Allmendinger & Haughton, 2009; Van Assche, Teampău et al., 2008; Delanty & Rumford, 2005; Brambilla, 2009; Van Houtum, 2010; Van Houtum, 2010b; Parker (ed.), 2008; Parker, 2009. For overviews, see e.g. Brunet-Jailly, 2005; Kolossov, 2005.

²⁰⁴ See Johnson et al., 2011.

²⁰⁵ See e.g. Paasi, 2011; Johnson et al., 2011, pp. 62-63.

²⁰⁶ Paasi, 2011, p. 28.

where borders, freed from the framework of classificatory limology, are again investigated from the perspectives of general theories of the social.

The aim of this chapter is to demonstrate the potential for a conceptualization of borders within the wider social-theoretical perspective of social systems theory, henceforth systems theory, as developed largely by Niklas Luhmann (1927-1998).²⁰⁷ His version of systems theory shares similarities with, among others, the archaeological approach of Michel Foucault²⁰⁸ and the actor-network theory of Bruno Latour, ²⁰⁹ but it adds a theory of society²¹⁰ which places the research object within a wider societal context - and not just historically. To our view, Luhmann's systems theory aligns well with the current paradigm in border studies, which describes itself as having moved from the study of "boundaries, as political limits of states, to borders as socio-territorial constructs"²¹¹ or, phrased somewhat differently, from lines on the map to discursive practices of b/ordering. Systems theory has the potential of bridging the distinction between these two approaches, that is, of conceptualizing the relations between lines in space from virtual to natural or built-up by humans – and the social construction and signification of borders and boundaries.

A difficulty we face in this endeavor, is the general tendency of disqualifying Luhmannian systems theory for its ignorance of space, and thus its inability to understand the impact of space on society and vice versa. This is, however, a characterization of systems theory that we do not share and, indeed, various scholars have already demonstrated the

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<sup>207</sup> Luhmann, 1995; Luhmann, 2012b.
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²⁰⁸ Pottage, 1998.

²⁰⁹ Noe & Alrøe, 2006.

²¹⁰ See Luhmann, 2012b.

²¹¹ Van Houtum, 2005.

²¹² See e.g. Gren & Zierhofer, 2003; Koch, 2005; Stichweh, 2000, p. 190

opposite.²¹³ Similar for the suspicion that systems theory leads to a kind of metaphysics or even mysticism.²¹⁴ It was one of Luhmann's main ambitions to bid farewell to metaphysics, positioning his work in and, indeed, helping to build a tradition of radical constructivism.²¹⁵ Rather than metaphysics, which points us to deeper truths, systems theory offers a self-reflexive set of distinctions that aid scientific observation.²¹⁶ Systemstheoretical analyses are historically grounded and contextual and have produced innovative insights at various levels of abstractness and geographical scale.²¹⁷ The complexity and coherence of systems theory allows for a very clear and precise analysis of how physical space, continuous or segmented in a variety of ways, impacts on the attribution of meaning via discursive practices - 'communication' in Luhmann's terminology. As such, bringing Luhmann into border studies not only contributes to lessening fragmentation, without sacrificing interdisciplinarity, in the the interdisciplinary analysis of borders, but also suggests one possible avenue in the recent spatial turn in the social sciences and humanities. ²¹⁸

Within border studies, the issue of society and space can be found in the classic distinction between natural and non-natural borders. This distinction, however, has lost most of its authority with the advent of poststructuralism, which sees both as socially constructed. According to Henk van Houtum, the present consensus over the fact that all borders are human-made or discursively constructed leads to a certain disregard of their spatial manifestations.²¹⁹ His argument

²¹³ Miggelbrink & Redepenning, 2004; Kessler & Helmig, 2007; Helmig & Kessler, 2007; Gershon, 2005; Lippuner, 2005; Schack, 2000.

²¹⁴ See for example Rossbach, 1996.

²¹⁵ Von Glasersfeld, 1991; Moeller, 2012; Luhmann, 2012b.

²¹⁶ Luhmann, 1990a.

²¹⁷ For examples from the authors' work, see e.g. Jacobs & Kooij, 2013; Van Assche, Beunen et al., 2011; Van Assche et al., 2009.

²¹⁸ See e.g. Rumford, 2006, p. 160; Kessler & Helmig, 2007, p. 572.

²¹⁹ Van Houtum, 2005, p. 676.

is that the postmodernization of science has made the focus on construction, i.e. on symbols, signs, identifications, representations, performances and stories, mainstream.²²⁰ The call for discursive analysis therefore seems to have been heard.²²¹ Despite the continued need for a lens which challenges bounded spaces²²² and helps us move away from naturalistic views,²²³ recent scholarship has argued for a renewed interest in the spatiality of borders, especially within (political) geography.²²⁴ However, it remains a challenge to integrate approaches that focus on the physical context with those that focus on discursive construction. In other words, with the becoming redundant of the distinction between natural and non-natural borders, also the impact of the physical context seems to have moved to the background. We believe that it is not only conceptually enriching but plainly necessary to insist on the relationship between the two, between our physical environment and processes of social meaning-making (discourse). Therefore, the perspective developed in this paper, regards a two-way relationship in which the physical environment, including human-made border structures, provides part of the conditions for social (bordering) processes and in which social processes force interventions in the physical environment.

Arguably, a recalibration of the conceptual framework towards the physical context could mean that it becomes harder to understand the increasing fluidity and mobility of borders, for instance where the function of managing migration is concerned, an often-mentioned case in the contemporary debate on borders.²²⁵ Such borders have become virtual and manifest themselves in various places

²²⁰ Van Houtum, 2005, p. 675.

²²¹ See Newman & Paasi, 1998.

²²² Johnson et al., 2011.

²²³ Van Houtum, 2005.

²²⁴ See e.g. Johnson et al., 2011, pp. 65-66.

 $^{^{225}\,}$ See e.g. Johnson et al., 2011; Rumford, 2008b.

away from the territorial border line. By focusing on the territorial border line, it becomes more difficult to understand and scrutinize this virtual securitization of the world, deemed one of the important challenges for contemporary scholarship. However, we should not forget the relation between land borders and security functions. The interesting question is as to why it is no longer feasible to attribute such functions to land borders –at least in the western-European context? There is thus a decoupling of *spatial* and, in many cases, *ethnic* boundaries, but to understand precisely such processes is highly relevant to contemporary research agendas.

In sum, the added value of bringing Luhmann's systems theory into border studies, is its fundamental interdisciplinarity based in the most general and empirically open concepts, which means at the same time that it is highly transcontextual. It can provide border studies with a common conceptual "framework" without forcing scholars to study the same topic, e.g. the anthropology of borderlands, international relations, virtual borders, etc. It safeguards and encourages the current diversity. Nonetheless, there is a need to build further on systems theory in order to get a better grip of the border phenomenon. The concept of *empirical boundary*, therefore, represents a deliberate innovation of the Luhmannian framework. Also, the distinction between social, spatial, and other conceptual boundaries is introduced in order to provide border studies with tools to make the connection between empirical, socio-material, contexts and (radically constructivist) social theorizing.

To solve the problem of needing to seek refuge in the classification of physical borders, e.g. into natural, cultural, or otherwise, we introduce the notion of the 'empirical boundary'. It is empirical in the sense that it can be experienced, observed and, possibly, transformed within or as a result of discursive practices. But only within the discursive does it gain its meaning as a specific type of border or boundary. It is not defined beforehand, for instance, by border scholars. The empirical boundary is a potential

boundary, its meaning remaining undecided until it is conceptualized in discourse(s).

The distinction between discursive and material features as the main focus of our Luhmannian reconceptualization of borders. As a distinction, it can only be considered from within the discursive - where meaning is constituted - and as such, it necessarily remains asymmetrical, i.e. there is no emancipation of space in a Luhmann-inspired framework. However, there is the acknowledgement of the paradox that underlies all theorizing, namely the need to draw a distinction, such as that between the discursive and the material but within the discursive, so that the material becomes reconstituted discursively.²²⁶ This, too, pertains to borders. They can be more or less visible, more or less invested with political functions, and more or less re-negotiated by borderlanders,²²⁷ in all cases, they are *empirical*, i.e. meaningful to some in certain respects.²²⁸ But how do borders, which are merely empirical, become the source material and outcome of further social construction? How does discursive and material reality couple and decouple, in adding, transforming and removing functions to and from borders? Finally, we opt for the terminology used in Luhmann's own writings, which means that we use the distinction between system and environment rather than that between the discursive and the material. This entails a crucial difference, which, we argue further on when we deal with this distinction, helps to gain greater conceptual precision.

The chapter is structured as follows. First, we will briefly introduce basic ideas in Luhmann's systems theory in order to clarify the distinction between system and environment

²²⁶ In this lies the radical constructivism of Luhmann's systems theory, see e.g. Moeller, 2012.

²²⁷ Johnson, 2009; Rumford, 2008b.

²²⁸ In the semiotics of C.S. Peirce (1994), this is formulated as standing "to somebody for something in some respect or capacity".

and to conceptualize borders as part of the environment. Also, some attention needs to be paid to how we can understand the relation between politics, as a specific discursive sphere, and borders from the perspective of systems theory. Second, we zoom in at the spatial by investigating how the dialectic works between borders (territorial boundaries) and other physical boundaries on the one hand and the social system on the other. This is where we develop our model of the *empirical boundary* vis-à-vis *boundary concepts*, inspired by systems theory, but much further specified. Finally, in the conclusion we attempt to sum up and schematize the key points of our systems-theoretical perspective.

4.2 Luhmann at the border

Systems theory conceptualizes all empirical phenomena, including borders, as social phenomena. A major advantage of systems theory is that its conceptual apparatus in itself is 'empirically empty', and thus allows for diversity and variation in social reality, making it sensitive to context. This is due to its starting point in second-order observation.²²⁹ Paraphrasing Oliver Kessler and Jan Helmig, we do not ask what the border is, but how, according to which distinctions, it is separated and framed. The task is thus not to observe borders, but to observe how others observe borders.²³⁰ This links Luhmann to the major thinkers of French postructuralism, i.e. the archaeological approach of Michel Foucault, Derrida's deconstruction and the work of Bruno Latour.²³¹ Second-order observation is the thrust of a methodology inspired by systems theory. It does not apply definitions of borders but of the mechanisms of boundary

²²⁹ Kessler & Helmig, 2007, p. 579.

²³⁰ Kessler & Helmig, 2007.

²³¹ For more extensive analyses, see e.g. Lorentzen, 2002; Lehmann, 2004; Borch, 2005.

construction so that it highlights contingency and multiplicity in the empirical reality under observation.²³² The following paragraphs will briefly introduce Niklas Luhmann's theory of self-referential social systems and then move on to rethink the notion of border from that perspective.

Systems theory starts from the premise that 'the social' is communication. Through communication we make sense of the world, that is of ourselves as well as the rest of what can be perceived. Much like Foucault's notion of discourse,²³³ which we maintained in the introduction of this chapter and the introduction of this book, communication is not only a result of observing the environment but it also shapes the way in which the environment is observed. In other words, communication establishes meaning, and as there are different modes of communicating, i.e. based on different sets of distinctions, there are different ways of attributing meaning to one and the same physical world. Communication, understood in a wider sense than just linguistic interaction, is the only way for us to develop intersubjective frames of reference, or specific ways of attributing meaning to our environment.

It is through reference of communication to (earlier) communication that it becomes possible to build up complexity in our understanding(s) of the world. The intersubjective frames of reference that thus develop through communication, we will call social systems. They entail recognizably different modes of observation and, moreover, they are in constant evolution, as each new communication is built selectively on earlier communications, involving remembering and forgetting, i.e. systems' adaptation. ²³⁴ According to Luhmann, one category of social systems is formed by global function systems, such as politics, law, science, the economy, and

Multiplicity on the side of empirical reality implies 'multiperspectivity' on the side of the research framework. See C. Rumford, 2012.

²³³ Rumford, 2012, p. 576.

²³⁴ Van Assche et al., 2009.

various others.²³⁵ These are available to us as modes of communication – or thought – each based on specific codes, such as power/no power, legal/illegal, true/false, and payment/no payment, respectively. Political, legal, scientific or other functional communication, however, takes place in an interaction or in an organization, so that, besides function systems, we need to distinguish interactions (encounters) and organizations as specific categories of social systems, ²³⁶ that is to say, function systems should not be understood as *localized actors*. Organizations are often functionally hybrid, ²³⁷ that is, they combine various modes of communication, such as economic as well as legal in the case of a company, or scientific as well as economic in the case of an educational institute, in addition to being able to maintain their own unity as this or that organization vis-à-vis others.

A social system is a dynamic process of communication²³⁸ based on difference,²³⁹ emerging as the drawing of a contingent distinction, like good/bad or true/false but also body/mind or global/local. The terms in a distinction acquire their meaning only through relating them to other terms, that is, through further communication. What Reece Jones,²⁴⁰ in his recent contribution to the border theory discussion, terms 'categories', systems theory would call 'distinctions' which get their meaning through subsequent distinctions, hence making sure that the boundaries of a category constantly shift.²⁴¹ The example of 'boundary studies' understood as being constructed by means of distinctions indeed shows evolution, broadening and narrowing down what is and what is not part

²³⁵ Luhmann, 1997a, pp. 707-743.

²³⁶ Luhmann, 1995, p. 2.

²³⁷ Andersen, 2001.

²³⁸ Luhmann, 2002b, p. 155.

²³⁹ Cf. Luhmann, 2006.

²⁴⁰ Jones, 2009.

²⁴¹ Jones, 2009, p. 181.

of it, in the process of its boundary maintenance.²⁴² A social system is therefore a web of relations between communicative events in time. Meaning comes about through relations. In other words, the border as a concept acquires meaning in and through different systems, different processes of communication over time, with different meanings as result. The current situation in border studies is paramount to this example, where scholars deal with the term 'border' from very diverse angles and, therefore, essentially have different border concepts. Depending on the communicative context, that is the history of communication - which includes remembering and forgetting - specific to a certain setting, e.g. a scientific discipline and geographical context, 243 therefore, 'border' means something, and this meaning evolves with every new communication and can only be established by every new communication.

4.2.1 System and environment

The basic, and deliberately chosen, distinction at the heart of systems theory is that between system and environment. 244 A system of communication distinguishes itself from its environment. Depending on the kinds of distinctions made by the system, it develops a specific capacity for observing its environment. In order to tackle complexity of the environment, a system needs to build its own complexity, internally. A clear example would be the legal system, which observes its environment through the distinction of legal/illegal, 245 and hides the contingency of this distinction by means of further distinctions, for example, in laws and jurisprudence. Similarly, science uses the code true/false but this is cloaked in additional distinctions, e.g. those conveyed

²⁴² Luhmann, 1995, p. 17.

 $^{^{243}}$ On the relationship between the mechanism of remembering/forgetting and geographical context, also see Van Assche et al., 2009.

²⁴⁴ Luhmann, 2012b, p. 76.

 $^{^{245}\,}$ King & Thornhill, 2003.

by theories. Both examples are intended to show the self-referential nature of social systems. In systems theory, as already indicated in the introduction, it is the distinction between system and environment that guides scientific analyses undertaken from the perspective of systems theory in the attempt to make the best claims to truth.²⁴⁶

The distinction between system and environment points us to the logical necessity of system boundaries. For a system to maintain itself, rather than becoming indistinguishable from another system, it needs foremost to maintain its boundaries.²⁴⁷ And here, we deliberately use the term 'boundary' rather than border in order to distinguish between the non-spatial boundaries of the social system and the spatial, ethnic or other boundaries that are constructed by system's communication processes. By means of its boundary, the system distinguishes itself from its environment; in other words, from other systems and the material world. For example, law has to distinguish itself from science (true/false) and morality (good/bad), which represent fundamentally different ways of relating to the world. It also distinguishes itself from the physical world sec as it produces utterances that are recognizable for adding follow-up communications. Otherwise, we would merely have environmental noise.²⁴⁸

A social system as a communicative process is autopoietic.²⁴⁹ It is interested in its own reproduction. Basically, this is its ongoing difference from its environment. It is therefore of major importance to maintain its system-specific perspective on the world, which should be different from that of other systems. Otherwise, it would run the risk of merging with another system and vanishing. The existence of different ways of relating to the world, according to Luhmann, is a

²⁴⁶ Luhmann, 1990a.

²⁴⁷ Luhmann,1995, p. 17.

²⁴⁸ Luhmann, 1995.

²⁴⁹ Luhmann, 1990b.

hallmark of modern society.²⁵⁰ Different social (function) systems deal with different aspects of the physical and social world. They create parallel, semantic universes supposed to represent the world. But because it is the ongoing evolution of the system's structures and semantics that limits and enables the way in which the system observes, systems theory positions humans, territorial borders, landscape, and other empirical phenomena in its environment. Depending on what system does the observing, such phenomena obtain meaning.

Irrespective of the objective existence of space, systems enact space, create spatial references, and develop a systemspecific way of observing space through communication. Besides invoking a variety of (spatial) activities and physical transformations, systems can apply specifically spatial distinctions.²⁵¹ Law, for instance, constructs jurisdictional territories (a specific version of space), with an inside and outside. What is generally seen as space, in the system of law acquires a meaning that is connected to legality and illegality.²⁵² What may be seen, on the map, as the same space, has very different meanings and practical consequences depending on the observing system, e.g. politics, the economy, etc. Additionally, when we take into account organizations, with their functional hybridity, we see that it is much more complex than a battle between function systems, that is, of economy versus law or politics versus economy etc. Each organization integrates functional logics in a unique way, so reality always amounts to surprise. Therefore, systems theory underscores that it is necessarily a multiplicity of meanings which is attributed to space.

Being part of the environment and not of communication, borders, once delineated, provide a reference point for communication, ²⁵³ most significantly in politics and law but,

²⁵⁰ Luhmann, 2012b.

²⁵¹ Redepenning, 2006.

²⁵² King & Thornhill, 2003; Luhmann, 1990b.

²⁵³ Lippuner, 2005.

as other systems emerge and evolve, also for every other social system that is – for whatever purpose – concerned with the observation of space, which many systems are. Different systems attribute different meaning to a border – and some may even be oblivious of a certain border.²⁵⁴ In a social systems perspective, borders become more solid when more systems internalize them. They become more operative in social life when several types of boundaries in several social systems are constructed and incorporated in their self-reproduction. This entails that various mutually reinforcing boundaries silently become part of the understanding of self and world in several perspectives on that world.

4.2.2 Politics, law, and regional differentiation

Boundaries discussed in geography are said to be 'spatial' but often, of course, they are administrative, and belong to the category of boundaries functional in politics. Political boundaries (borders), as far as they are externalized as lines in physical space, marked or unmarked, are not merely spatial, in the sense of physical, but bear different kinds of spatiality, depending on the observing system. In most cases when border scholars refer to the border, they imply the border reference of the political system. Other references are possible too, e.g. when anthropologists refer to the border as a social or cultural boundary.²⁵⁵ Both seem to converge, however, with the idea of the nation in the context of territorial states, where one suddenly speaks of national society and national culture. Nonetheless, it is clear that one can easily identify mismatches between territory and culture. In this paper, we focus foremost on the border that is the territorial boundary, as it functions in politics and law. Let us, therefore,

²⁵⁴ Systems theory is therefore also 'multiperspectival' in the sense of Rumford (2012), who makes some points that would be very much at home in a systems perspective, e.g. that borders are not (always) projects of the state, that they do not exist for all, or that they can be effective without being visible.

²⁵⁵ E.g. Barth, 2000.

briefly outline the way in which politics (state) is conceptualized in systems theory²⁵⁶ to explain the function of borders.

State borders could only come into being as a result of social evolution, that is, the historical emergence of conditions of possibility.²⁵⁷ These borders are evolutionary achievements in modern politics and law, and they are the corollary of 'territorial sovereignty' which can be seen as the principle of the modern nation-state system.²⁵⁸ A constructed border like this is part of the way politics and law are organized, i.e. manifest themselves in organizations. They need it in order to establish where their sovereignty ends, enabling the electoral process and the making of policy and law, through a variety of organizations. In their way of observing the world, political organizations see the nation as a spatial entity, a land and the people who inhabit it.²⁵⁹ Without a clear border, problems would arise for representative democracy or indeed any other type of political organization. The modern political system thus needs and reproduces its territorial borders. Many other social systems have adopted this border as they go through their operations because it is easier to adapt to this important instrument of government and law than it is to conflict with it. As a result of the contingent evolution of the nation-state, with its specific differentiation of politics and law, 260 commonsense now envisions states and their borders as collections of people and land, belonging together as this particular entity in the world, as well as actors on the world-stage.

Territory and territorial borders are outcomes of the operations of social systems and, moreover, of a global but

²⁵⁶ Concise explorations of nation and state from the perspective of systems theory are offered by Thyssen, 2007; Luhmann, 1990c.

²⁵⁷ Kratochwil, 1986; Elden, 2010.

²⁵⁸ Kratochwil, 1986.

²⁵⁹ King & Thornhill, 2003, pp. 86-91; Luhmann, 1990c, p. 146.

²⁶⁰ See e.g. King & Thornhill, 2003.

regionally differentiated political system.²⁶¹ In Luhmann's view, politics is seen as a global system for making collectively binding decisions.²⁶² In order to function empirically, however, such a system is organized first of all by being regionally differentiated by means of borders. On the basis of this, it can deploy various political organizations, such as ministries, that deal with specific themes in terms of policymaking. Regional differentiation is particular to politics and law but is, in principle, not a prerequisite for the autopoiesis of the economy, science, or other spheres of society.²⁶³ The political and legal status of borders, however, makes them consequential to what can and cannot be done in those other spheres.

4.3 Systems theory and the empirical boundary

In this section, we build up our Luhmann-inspired perspective on borders. Building on the notions introduced in the previous sections, we intend to derive a matrix for the analysis of bordering that can be applied in many different contexts of research. First, we will go into the process of boundary formation and reproduction that takes places within individual social systems. Second, we will explore the way in which boundaries lead to changes across different social systems. Finally, we will tackle the issue of hybridity in human-made or natural borders in space, where we introduce the notion of 'empirical boundary' in order to be able to speak of something that is pre-social, or not yet conceptualized within communication and society but influencing society anyway. This could also be considered with the notion of virtual border, a border that awaits observation and meaning attribution.

²⁶¹ See Helmig & Kessler, 2007; Luhmann, 2012b.

²⁶² Luhmann, 2000a.

²⁶³ Luhmann, 1982.

4.3.1 Social, spatial, and conceptual boundaries

Now that we have dealt with the distinction between system and environment and have acknowledged people, space, and territorial borders as existing in the environment of social systems - as systems themselves consist only of communication and nothing else - we proceed safely within the domain of the conceptual. In order for systems to deal with people, for instance in order to include or exclude, there is the need for people concepts, such as class or culture, which lead to, what we call, social boundaries. Obviously, but not necessarily, these connect to spatial concepts, such as region or country, which give rise to what we call spatial boundaries. Finally, there are boundaries that delimit other concepts, which we will therefore call conceptual boundaries.²⁶⁴ All three types of boundaries are products of social systems of communication, and in that sense concepts. The typology should therefore be understood as two domains (the spatial and the social) carved out of the conceptual, or, in other words, as spatial concepts, social concepts, and other concepts, each associated with boundaries. Spatial, social and other concepts are delineated as they would otherwise not be able to function in communication, and the delineation of each of them structures further communication. Categorization enables conceptualization and conceptualization shapes thinking, that is individual cognition.²⁶⁵

What interests us mostly is that spatial, social and other conceptual boundaries can mutually define or reinforce each other. The manner in which a social system conceives of spatial units is likely to be related to the manner in which it delineates social groups and these processes can be influenced by the demarcation of other concepts. 'Flanders' and 'the Flemish' are concepts that require boundaries to be meaningful, as well as links to each other and various other concepts. The spatial and conceptual delimitations of

²⁶⁴ Barth, 2000; Van Assche et al., 2008.

²⁶⁵ Cf. Jones, 2009.

Flanders are linked. If the spatial boundaries of Flanders would change, and/or the conceptual boundaries of 'Belgium' and 'Europe', this will affect the conceptual boundaries of 'Flanders'. Not every concept of space is likely to become related to every social category and every other concept in the semantic universe of a social system, but we consider it crucial to keep open the possibility of these three types of entanglements occurring. Social boundaries as conceptualized in e.g. law tend to trigger the actualization of a specific set of spatial boundaries, and they tend to activate a set of other concepts (e.g. justice, equality, government, taxation, education) whose delineation further shapes the reasoning. 266 If nobility, commoners and clergy are distinguished by law as bearers of different (potential) bundles of property rights, the boundaries between noble lands and commoner lands will have different meanings than the lines separating plots used by several commoners. If the nobility extends its reach, either spatially or in terms of a more comprehensive bundle of rights, this can be experienced as 'oppression' by commoners, while accretion of rights and property by commoners can be perceived as an insidious undermining of a God-ordained social order by noblemen. If Tuscany is deemed a cultural unit and a landscape unit, this tends to spark off a series of associations within the same social system, associations with new concepts whose delineation, again, is not without consequences.²⁶⁷

4.3.2 Relations between systems

The linkages between function systems are thus intensified because of couplings with organizations (as social systems) and with psychic systems (individual cognizing minds). As soon as thoughts are expressed in formulation by psychic systems, this has an effect on social systems, and as soon as organizations reproduce themselves by means of

²⁶⁶ For example Beunen & Van Assche, 2013.

²⁶⁷ For place branding implications, see e.g. Van Assche & Lo, 2011.

communication, this also reshapes the function systems. In this autopoietic (self-reproducing) perspective, the structure of the function systems, their procedures, but also their semantics, are influenced by these various environments.²⁶⁸ It entails that the relation between social, spatial and conceptual boundaries within one social system is not merely a dialectic internal to that system. Events in the other social systems can alter the delineation of these types of concepts and their rules of engagement. Political changes can lead to different political boundaries, leading to different legal boundaries, impacts on the actions of economic organizations, and, in the longer run probably, on the delineation of social groups. If a group of business controls access to native land and natural resources, this can lead to a backlash in politics, to policies intending to generate income for native people, which in turn can trigger a contestation of, and possibly redefinition of ethnic boundaries.²⁶⁹

In a systems perspective, the 'jump' to other social systems is not made directly but necessitates a translation, a reinterpretation into the semantics and programs of the other system. The self-reproduction of social systems requires operational closure.²⁷⁰ The production of elements and structures out of elements and structures requires that nothing from the environment can directly enter the system, without interrupting the autopoiesis of the receiving system. Thus, a political change, caused by calculations in terms of power/not power, as in the political system, can trigger legal changes, but these can only function as law if they are codified as law, and can trigger responses based on the distinction legal/illegal.²⁷¹ A political change can cause economic change, but economic actors can only respond to that by means of reasoning in terms of payment/no payment. A new

²⁶⁸ Luhmann, 1995.

²⁶⁹ Cf. Hickey, 2003.

²⁷⁰ Luhmann, 2002b, p. 160.

²⁷¹ King & Thornhill, 2003.

sensitivity in politics for environmental problems can lead to policies intending to deal with climate change, but if businesses cannot translate these policies into economic calculations, this uncertainty will likely disrupt the economy as a whole.²⁷² New political boundaries, either internal or as an external border, can therefore cause changes in the spatial, social and conceptual boundaries that enable the reproduction of the economic system and other systems, if and only if there is a translation into the internal logic of the other system. Possibly, one of the types of boundaries will be affected first (e.g. spatial boundaries), after which social and conceptual boundaries slowly adjust in a system-internal dialectics. More political rights for formerly underprivileged groups, or their recognition as a group in politics, can lead to higher wages, to companies moving out or adjusting, to a redefinition of good and bad neighborhoods, to new political alliances.

4.3.3 Empirical boundaries

With the insistence on the social construction of everything, social systems theory does leave room for a conceptualization of physical borders and boundaries. As soon as they enter communication, they are transformed into concepts, subjected to the internal discursive dynamics of the receiving system and the sensitivities for neighboring systems. But it is also possible that there are physical boundaries that are not observed as boundaries within politics, science and economy, but still have boundary effects, in the sense of impediments.²⁷³ One can think of the boundaries of ecosystems, such as woods, marshlands, coastlines, mountains or deserts.²⁷⁴ These units, as described in the system of science (and its disciplines as subsystems) are not necessarily inscribed in the self-reproduction of law, politics and economy, but they can have the same effects on

²⁷² Cf. N. Luhmann, 1989.

²⁷³ Luhmann, 2002a.

²⁷⁴ Cf. Stichweh, 2000, p. 190.

the internal organization of law, politics and economy as boundaries that are explicitly conceptualized. One can imagine a large marshland, with the internal economic and political organization shaped by the properties and boundaries of that ecological unit, 275 without an awareness with the local players that this is the case and that the boundaries of the marshland are relevant. In other words: the effects of physical boundaries are not restricted to the production of a semantics of boundaries. One can then speak of boundary effects of physical boundaries when social systems 'hit the wall', when certain activities described in and elicited by the social system are harder to do,²⁷⁶ are affected by the boundary, or when a certain form of communication loses credibility and thus functionality because of the boundary. Basically, a certain construction of meaning by a social system conflicts with changing circumstances, that is, changes in the environment, that 'irritate' the system, bringing it into a (minor) crisis, and forcing it to reconsider the way in which it observes its environment at the threat of becoming obsolete when it is not able to adapt.²⁷⁷

For a social system, however, it is not possible to distinguish between the environment as in the other social systems, and the physical environment.²⁷⁸ For a social system, there can be many distinctions within 'the' environment, yet it cannot know how the resulting spatial categories relate to physical realities. The only access it has to that physical environment is by means of the production of boundary concepts. Among other things, this means that a social system is not able to distinguish between the physical environment and the effects of communications that hardened into physical obstacles.

²⁷⁵ See e.g. Van Assche et al., 2008; Van Assche, Beunen et al., 2011.

²⁷⁶ See for example studies on the Danube Delta by Kristof Van Assche and others, e.g. Van Assche et al., 2009; Van Assche, Duineveld et al., 2011.

²⁷⁷ Luhmann, 2002a.

²⁷⁸ Luhmann, 1995, p. 177.

It cannot tell the difference between pre-existing physical boundaries and the results of the activities of social systems (including itself) that triggered results in the physical world. A social system can only distinguish between a geological/hydrological/ ecological boundary and a line produced by histories of land use, e.g., if specialized communication systems arise to make these distinctions, as in the scientific discipline of geography. Such a discipline (as a subsystem of science) can observe the difference, yet this does not translate in other systems making that same observation, or acquiring an ability to make the distinction.²⁷⁹ For that reason, we speak of *empirical boundaries*, as boundaries that function as boundaries but do not originate in the internal semantics of the observing system.

Let us give some general examples of how such empirical boundaries assert themselves. Economic transactions can suddenly have different effects, or can become harder to calculate, beyond a certain line, while political calculations can be different, and the implications of legal decisions or the way to get to them might differ between places. The legal, political and economic systems sometimes take account of these differences on the basis of their own spatial semantics, but not always.²⁸⁰ The function systems can be irritated by these spatial differences without being able to conceptualize them. Or, their spatial semantics can in some cases be underpinned by empirical boundaries, physical boundaries of natural or communicative origin. Some of these are associated with physical obstacles and ecosystem boundaries, others are effects of system activities that are externalized, and thus, forgotten. Environmental pollution e.g. can be unobserved for a long time, while forming an obstacle for the reproduction of many social systems, ²⁸¹ and it can create spatial boundaries of which the origin is not always reflected

²⁷⁹ Luhmann, 1989.

²⁸⁰ Also see King & Thornhill, 2003, pp. 182-202.

²⁸¹ Luhmann, 1989.

upon. Forests can be cleared a long time ago, and the ecological consequences account for a landscape that imposes its boundaries on many human activities (and understandings).

An empirical boundary, or border in the case of the political system, can be a physical boundary that coincides with an ecosystem boundary or a landscape unit, something that can be hit upon and triggers effects in economic, legal, political organization: a boundary of a mountain ridge, a meadow zone on the mountain, a spring zone in the meadow. It can also be an unobserved result of older social activities, either framed by the observing system or by others, that intrudes as an object made foreign by forgetting, and that can trigger shifts in the organizational configuration of the area.²⁸² So, both at the level of function systems and at the level of organizations, the observing system cannot make the distinction between what is human-made and what is natural. once it is in the environment of the system (and not conceptualized in the system itself). What was said earlier about the resonance of shifts in one system in the others, applies here as well: if one system, e.g. the economy, hits upon a hard boundary in the environment it did not conceptualize adequately, this can resonate in the political and legal systems, and at the level of organizations. If in an area booming economically because of shale gas, science finds that the shale is leaking much more than anticipated, causing health and environmental problems accepted by none, existing laws can step in, political shifts may occur, new laws might be enacted and with shifts in political culture might come new social identities. At the level of organizations, effects remain unpredictable. Business can become harder, different products or clients might be envisioned, innovation might be spurred.²⁸³

²⁸² Van Assche et al., 2009.

²⁸³ Cf. Luhmann, 1989.

4.3.4 The hybridity of empirical boundaries

A consequence of the inability to distinguish between physical boundaries of natural origin and of systems (human-made) origin in the environment is that hybrids cannot be recognized as such, and that the nature of their hybridization cannot be discerned. In other words, the empirical boundary that is de facto hindering or otherwise structuring societal communication in a specific case, will in all likelihood be hybrid, but this is hard to establish from within an observing system.²⁸⁴ Especially in places where the history of human land use is long and complex, where communities and their histories emerge and fade, externality to the social system at a given moment is likely to be hybridity. not nature or culture. Neither societies as a whole, nor their organizations and function systems remember everything, and have everything they do remember available in a cohesive and accessible synthesis.²⁸⁵ The law does not remember the origins of law, nor does it theorize the spatial boundaries containing its application; politics recalls histories selectively, and transforms them frequently, when it suits its own calculations, and corporations reproduce locally bounded authenticity selectively when it fits their goals and their current construction of self. Social systems also produce guiding narratives on self and place that are necessarily selective and mythologized.²⁸⁶ What is experienced is framed in and by these narratives, and the way physical boundaries are conceptualized follows that same principle: they will be explained by reference to the same concepts and narratives that hide and reveal certain aspects of nature and history.²⁸⁷ Physical boundaries intruding in the reproduction of social systems are likely the result of entwined processes of landscape change and landscape alteration by the hands of

²⁸⁴ Luhmann, 1990b, p.3-4.

²⁸⁵ Van Assche et al., 2009.

²⁸⁶ Van Assche et al., 2009.

²⁸⁷ Van Assche et al., 2009.

man. People in a large wetland area might have forgotten that Soviet agricultural engineers introduced carp species that then messed up the aquatic ecosystem; this mess might remain unnoticed for a long time, especially when the new fish are considered as tasty as the old ones.²⁸⁸ If, however, the new fish alter the ecosystem in such a way that it becomes in many places useless for them, to the point they are naturally replaced by a significantly less tasty, and therefore valuable, fish, then the boundaries of the low-value-fish areas become significant, and for locals it is impossible to discern exactly how nature and culture are entwined in this empirical boundary.

In our model of bordering and boundary-making, the material world is thus not denied existence. It is also understood to be more than resistance to human intentions. activities, understanding. To use terms of Latour and actor-network theory, these empirical boundaries and borders are considered actants, entities that actively shape human communication and organization.²⁸⁹ Also for Latour c.s., the material object, human-made or natural, can shape the reproduction of society; also for them, the object is in all likelihood a hybrid. A difference between social systems theory and actor-network theory is that in a systems perspective, the material object always exists in the environment of social systems; it cannot be a part of it. The effects however can be described in similar terms for both theories. The border as a material object and other physical boundaries exert influence from afar.

In the manner of conceptual boundaries that define objects by delineating them, empirical boundaries can shape what happens within their confines. They can exert pressures that are felt differently by different function systems and organizations, and these pressures can be translated in different manners (similar to translation in actor-network

²⁸⁸ Van Assche & Teampău, 2010.

²⁸⁹ Latour, 2005.

theory).²⁹⁰ European laws can exert different pressures nationally and regionally²⁹¹ because of the differing legal frames at these levels, but also because of physical differences, implying boundaries between topographies, ecosystems, hydrological units, climate zones. The pressures can assert themselves at different times and in different forms: if human activities combined with climate change lead to desertification and shrinking desert oasis, then law can remain blind for the change at first, while economic shocks are first to come, probably followed by politics. If traditionally a large class of poorer citizens used the fringe lands, the shrinkage is more likely to produce political shocks. It is possible that empirical boundaries are suddenly felt when a social system expands its scope and the activities it triggers. Once that happens, the effect can be a shift in the understanding of spatial boundaries, but the effects can also be in the domain of social boundaries or other conceptual boundaries. If e.g. the economic development practices of a nation are rooted in the idea that land and resources are unlimited, and mountain areas and semi-deserts could easily be left untouched, at a later stage the pressure to develop these areas might become higher, and empirical boundaries are felt. It is possible that the empirical boundary becomes internalized, conceptualized, in such manner that it becomes incorporated in the structure of the social system.²⁹² One can think of the western frontier in the US, where many values in American society, part of the functioning of the legal and political system can be ascribed to an old spatiality that became incorporated into the fabric of society.²⁹³ In such a case, the empirical boundary triggers a political border, a spatial boundary imagined by the political system, and the empirical boundary truly becomes an actant.

²⁹⁰ E.g. Latour, 2005.

²⁹¹ Luhmann, 1989; Beunen & Van Assche, 2013.

²⁹² Luhmann, 1995.

²⁹³ Turner, 1893.

The American example also illustrates that borders (and other boundaries) constructed within politics or other social systems can provoke their own empirical boundaries. If social identity is associated with western expansion, and with agriculture, then arid mountains to the west tend to become an empirical boundary. Because of natural and entwined processes, new empirical boundaries can assert themselves even in absence of expansionist ideologies. And even within the same area, economic shifts might provoke changes in land use that meet new empirical boundaries.

System boundaries, boundary concepts (products of systems) and empirical boundaries do not necessarily move together then. Science, as a social system, can predict changing empirical boundaries, and introduce new boundary concepts before the arrival of the physical change, but often, science conceptualizes new boundaries a posteriori. ²⁹⁴ In some cases, the boundaries of science, including its internal (disciplinary) boundaries might have to be changed before new boundary concepts can be formed; 'climate science', as a new interdisciplinary field, had to establish itself within the scientific institutions before its spatial delineations were recognized as empirical and as scientific - and possibly influence politics. The expansion of social systems, producing ever more complex internal models of the environment²⁹⁵ and ever more activities in physical space, brings it closer to ever new empirical boundaries, but simultaneously it reveals more and more refined ways to overcome or adapt to these boundaries. Societies deplete natural resources and find new ones, create environmental problems and solve some of them, both producing new empirical boundaries and coping with them.²⁹⁶ Nevertheless, the conquest of nature is never complete, the distinction between system and environment cannot be erased completely. It is per definition easier to

²⁹⁴ Cf. Luhmann, 1990a

²⁹⁵ Luhmann, 1997a.

²⁹⁶ Luhmann, 1989.

manipulate and predict events in conceptual space than in physical space, so in all likelihood new empirical boundaries will assert themselves in the reproduction of society, and adaptation will in all likelihood not entirely be a matter of reflection, deliberation and planning. A social systems perspective on boundaries does not, therefore, minimize the risk involved in the continuous adaptation of societies. On the contrary, for Luhmann, the continuous creation of more internal boundaries, more boundaries between specialized systems, multiplies blind spots, translation difficulties, and hence unobserved risks, while often creating a false sense of security. Potentially very relevant or risky empirical boundaries can be ignored, or relegated to other subsystems which do not perceive the risk or cannot conceive of adaptation in terms that are broad enough to manage the risk.²⁹⁷

4.4 Conclusion

Luhmann himself once noted that systems theory had paid too little attention to borders. Especially the relationship with the physical landscape remains underexposed. We have aimed to reconcile the social and the physical dimensions of borders in a coherent perspective, presented as a possible avenue of finding common ground in an 'interdisciplinary discipline'. It is there, we believe, that Luhmann's systems theory provides insights which can unify various aspects and functions of borders and bordering into a new and positively tuned model of the border. Systems theory identifies borders as elements coproduced and reproduced by the political and legal systems – which are differentiated internally according to the principle of territorial sovereignty – and then incorporated into many other non-political social systems.

²⁹⁷ Luhmann, 2002a.

²⁹⁸ Luhmann, 1982.

²⁹⁹ Cf. Stichweh, 2000, p. 190.

At the same time it argues that many other systems do not require or even desire territorial borders in order to function. They adapt but also challenge them as what may be called globalizing processes,³⁰⁰ most notably the economy,³⁰¹ acknowledging social systems to be processes themselves. For Luhmann, society is a set of subsystems of self-reproducing communications. Communications are events, requiring spatial, social and conceptual boundaries to reproduce themselves, and his theory of social systems reasserts a point made in other theories as well, i.e. that borders can only be understood as impacts on other processes, on activities and on communications. Borders require bordering to be maintained, ³⁰² and bordering is essential to their understanding. 303 Furthermore, the functioning of borders can only be understood as part of a process of boundary-making and -breaking in various other systems, a process of continuous reconstruction of conceptual, spatial and social boundaries, with boundaries adapting to changes within the system, and changes in environments observed and deemed relevant. Since boundaries are part and parcel of the autopoietic reproduction of social systems and social systems are never entirely transparent for each other,³⁰⁴ bordering effects are never entirely predictable. There is no positivism in a Luhmannian model, that is, prediction or naturally grounded causality is impossible but it may be able to offer, what David Newman referred to as "a theory which will enable us to understand the process of 'bounding' and 'bordering' rather than simply the compartmentalized outcome of the various social and political processes."305

³⁰⁰ Van Houtum, 2010b, p. 117.

³⁰¹ Luhmann, 1982.

³⁰² Van Houtum, 2010.

³⁰³ Paasi, 1996; Jones, 2009.

³⁰⁴ Luhmann, 1995.

³⁰⁵ Newman, 2008.

In order to make systems theory fit for the study of borders, we introduced the notion of 'empirical boundary' to acknowledge the impediments that may be produced by the physical context without communication making any explicit reference to this matter of fact by means of boundary concepts. The empirical boundary, in other words, is a presocial (or post-social) boundary, existing in the environment of society (see Figure 5), which may invoke observation and conceptualization by social systems, but not necessarily. In its pre-social form, there is no way of establishing the empirical boundary as either man-made or natural. In all likelihood, it is hybrid, like the actants of Latour c.s.³⁰⁶ Depending on system-internal logics, understanding of this boundary might be constructed so that it comes to be seen as human-made, natural, or otherwise. And, finally, this understanding may be only temporary, as the physical result of system-environment dialectics remains part of the environment, so that in time, the empirical boundary may obtain a new meaning in society.

The environment is therefore crucial in the reproduction of society, but at the same time it is alien, foreign territory. Neither other social systems nor the physical environment can be fully known, predicted and manipulated. And because the hybrid nature of newly encountered empirical boundaries cannot be fully assessed, social systems will not even understand whether they are hitting a rock or a wall built by an old civilization. That is, until such distinction is internally constructed. The fact that we can write about walls and rocks, and the fact that in modern society the function system of science exists, with its ability to observe the distinctions other systems make (second-order observation) does not change that predicament. Science can only enter political, economic, or legal discourse when it ceases to be science, 307 when its second-order observation is reduced to first-order

³⁰⁶ E.g. Latour, 1988.

³⁰⁷ Luhmann, 1990c

observation, and, consequently, the wall becomes a rock again if that makes more sense in the systemic logic.

Now we arrive at Figure 5, which attempts a schematization of our systems-theoretical perspective on borders and boundaries. In line with Luhmann's systems theory, it starts with the drawing of the distinction between system and environment. The arrows that point right and left, crossing the boundary, indicate observation and conceptualization respectively. Objective causal effects ('access') of the social system in the environment or vice versa remain impossible, as all physical activity by humans (or machines) in physical space are part of the environment of the social system, whereas the social system itself is and remains operationally closed, that is, operates by means of communication and nothing else. It can only, after a while, observe anew the state of the environment and, in case it discovers unintended developments that it ascribes to its earlier activity, find new and better conceptualizations of that environment in order to invoke yet more (or less) interventions in physical space so as to arrive finally at what was desired. The dialectic can be perpetual, were it not for the fact that systems, operating in time, tend to focus attention to new issues and forget what they were dealing with earlier. In any case, this whole process of observation and (re)conceptualization can make use of the various categories of boundary concepts. It can, for instance blame the State (a social boundary), reshape territories/ regions (spatial boundaries) or point to globalization (other concept). And in most cases, these processes of sense-making link different boundary concepts to each other, hence the triangle. Finally, whilst this scheme is simplified in order to demonstrate the process from the point of view of one social system, other systems are usually involved as well. So on the system side of Figure 5, one should imagine links to other social systems, as boundary concepts in one system may trigger boundary concepts in other systems. One cannot establish beforehand, however, which or how many systems are involved. This is a matter of each specific confrontation of

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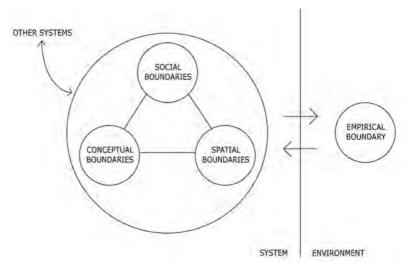


Figure 5 Systems observe empirical boundaries in their environment, either by being hindered by them or by delineating them in a way specific to that observing system. This invokes a dialectic between the empirical boundary and the way in which the empirical boundary is observed and conceptualized.

a social system with an empirical boundary unfolding itself as triggering effects in this or that other social system. The model thus represents no new border theory but an argument for ever new empirical research of a manifold phenomenon.

As a result of aiming to elaborate an interdisciplinary framework, our treatment of systems theory had to take place largely on a relatively high level of abstractness. This leaves our framework open for application to different themes and contexts. By means of illustration, we have included various general examples without, however, wanting to scrutinize a particular theme currently 'hot' in border studies, nor, indeed, did we want to discuss *all* themes. The treatment of physical space, in our theory construction and our empirical examples, should be considered valid as general mechanism of the way social systems relate to their environment and,

thus, also to the way individuals and groups of people can become the external reference point for systemic autopoiesis. There is a trial and error dialectic involved within the (re) bounding and (re)bordering of both physical space as well as (groups of) people. Many consequences of bordering go unnoticed until undesired outcomes force themselves to attention and society, that is, the totality of social systems, has another opportunity of coming to grips with this situation and with its own past understandings of the world. We argue for further development of the systems-theoretical avenue through further refinement and application of this framework across the various important themes, including cross-border cooperation, international relations, migration and security, the anthropology of borderlands, nationalism and cosmopolitanism, etc.

By means of these explorations, we have attempted to demonstrate in which way systems theory can provide a conceptual background, on a more general level of social theory, against which border studies may be able to account for the fluidity of present-day borders. From the perspective of systems theory, borders have always been fluid, well before the era of globalization. As social phenomena borders are essentially fluid, that is to say, contextual, dynamic and in a constant change. This, we argue, should merely be the starting point for analyses in border studies, not the research outcome.

Understanding empirical boundaries

CHAPTER 5

Rethinking Cross-Border Euregionalism as Self-Organizing System

Joren Jacobs & Krisztina Varró

"The influence that our organizational activities have on our behavior are brought to mind when we consider our preoccupation with attending conferences and faculty meetings, for example. On many occasions we feel obliged to attend, and quite often the experience is terrible. All attendants appear to suffer, but everyone attends and their own work is temporally put aside."

Niklas Luhmann, 1993

In Chapter 4, we have briefly touched on the term 'region'. I do not consider this a useful term to use scientifically, as an analytical concept. However, we find the term is used incessantly in the practice of (cross-border) spatial planning, and plays an instrumental role in the political system. Certainly, in order to complete our quest of unfolding the paradox of cross-border spatial planning, we cannot omit a treatment of the differences between, for example, physical space, regional representation, and functional region. In planning practice, usage of such concepts is imprecise and pragmatic but, to us, the relationship between planning discourse, which is very much about material realities, and material reality itself, deserves scrutiny.

For this article, which has been published earlier in the peer-reviewed journal *Space & Polity*, ³⁰⁹ I collaborated with Krisztina Varró to study the material actualization of what we have called "Euregionalism", using Peircian semiotics and ideas from material-semantic approaches. ³¹⁰ The main aim, rather than to debunk Euregionalism, on which part we entertain a slightly critical undertone, is to bring our findings in line with the framework of systems theory. The other way around, we may also say that we want to test and develop systems theory in the face of Euregionalism's empirical reality. This is possible by reconceptualizing it as self-organizing system(s). The result is that 'region' can now be understood as an example of the spatial concept developed in Chapter 4.

In the published article, the emphasis is less on systems theory than it is in this book as a whole. The original abstract is nonetheless informative: Studies of cross-border regions in the European Union have for long struggled conceptually with an apparent ambiguity of Euregionalism: namely that cross-border regions seem to be the manifestations of reterritorializing state governance on the one hand, but have clearly

³⁰⁹ Jacobs & Varró, 2014.

³¹⁰ E.g. Fuchs, 2001a; Latour, 2005; DeLanda 2006.

failed to substantially challenge the Westphalian state territorial system on the other. The aim of the present paper is to develop a conceptual framework that helps us come to grips with this paradoxical nature of cross-border regions. To this end, we draw on the systems theory of Niklas Luhmann and the semiotics of Charles Sanders Peirce, and propose to regard Euregionalism (and regionalisms more generally) as a self-organizing system. Self-organization entails the process in which self-referential communication, rather than a set of actors, employs spatial concepts, such as the region, to enable system-specific entanglements with physical space, either short-lived or enduring, and possibly involving governance, but not necessarily so. By these means, we attempt to answer this book's third research question: how can (cross-border) regions be conceptualized within systems theory and how do they enable political engagement (i.e. public policy, spatial planning, the (democratic) engagement of citizens)?

5.1 Introduction

We are at a conference venue. Neatly dressed women and men gather in the town hall, the fover of which is occupied by a reception desk and a range of stands with posters and piles of promotional brochures. Attendants receive a badge and a folder; the latter's cover page says 'Connecting differences' in German and Dutch and it contains, next to the program and an introduction of speakers, a map of the EUREGIO, where the Dutch-German national border is marked with a thin, hardly visible line. The brief welcome speech by the former president of the Euregio - held against the backdrop of a huge projection screen showing the Dutch and German national flags and 'Welcome' in Dutch and German - is followed by PowerPoint presentations, again in two languages or, if the presenter speaks Dutch, then in German, and vice versa. The presentations hardly generate debate or even raise questions among the audience, even though presenters do not provide what is promised by the conference title, namely 'Cross-border answers to population decline'. Only an explicit question of the moderator (the above mentioned former Euregio head) yields some – still very tentative and/or evading – answers.

Surely, it would be misplaced to draw any general conclusions from these impressions at the conference in the town hall of Bronckhorst (the Netherlands) on 16 May 2012. For us, however, it condenses well the overall fieldwork experience gained in the course of four years (2009-2012) of studying policy documents, talking to different actors involved in cross-border cooperation along the Dutch-German border, as well as attending various events like the one mentioned above. We believe many researchers focusing on cross-border cooperation would agree that the description is a fitting illustration of the way in which cross-border cooperation tends to be practiced along Europe's (inner) borders. In fact, our impressions seem to correspond well to the general scholarly assessment of European cross-border cooperation and that of Euroregions more concretely. Briefly, analysts have widely noted that the launch of the Community Initiative Interreg in 1990 gave a boost to cross-border cooperation that had previously been dominated by sporadic, bottom-up initiatives.³¹¹ The Interreg funding regime, just as programmes introduced at a later stage such as PHARE and TACIS, have acted as a catalyst for cross-border institution-building, often in the form of Euroregions. However, as many studies have pointed out, this unfolding Euregionalism has fallen short of initial expectations; Euroregions have arguably functioned more as for of symbolic politics and bodies of fund management, and have mostly failed to bring about substantial regional integration within Euregional territories 312

How can we account for the fact that conferences like the one mentioned above continue to take place, even if they fail

³¹¹ E.g. Perkmann, 1999; Gualini, 2003.

³¹² Ibid.; Scott, 2000; Knippenberg, 2004; Kramsch, 2008.

to adequately address the questions they pose? Or in more general terms, how can we conceptualize the spatiality of Euroregions given their apparent double-sided character – that they are being reproduced without achieving a wider meaningfulness? Coming to grips with this ambiguous development – that Euroregions have a clear 'territorial' reference point and a seemingly solid institutional base, yet have only achieved modest results in forging (new) coherent regions – has been one of the key tasks scholars of cross-border regionalism have set for themselves.

The vast literature on cross-border Euregionalism, however, has failed to adequately address this ambiguity. Carrying forward others' critique of the commonly applied state-territorial lens in studies on Euregionalism, 313 we suggest that the main reason for this failure is that scholars have tended to assess Euroregions against an a priori understanding of regionalism. This understanding is rooted in what Kramsch and Dimitrovova aptly characterize as the "bird's-eye view, one which, following the panoptic demands of nation-state cartographies, has as its ultimate rationality the production of an illusion of all-inclusive social and territorial cohesiveness". 314 In this chapter we call for an abandonment of this bird's-eye-view and elaborate an alternative perspective on Euregionalism, reconceptualizing it as a self-organizing system, with the help of Niklas Luhmann's theory of self-referential social systems (henceforth: systems theory) and the semiotics of Charles Sanders Peirce. In developing this perspective, we draw on our own empirical research in the Dutch-German-Belgian borderlands, and give some concrete examples. However, the chapter is primarily theoretical in orientation and has as its main aim to provide a new conceptual lens that can be applied to regionalism more broadly.

³¹³ E.g. Kramsch, 2007; 2008; 2010; Lissandrello, 2006.

³¹⁴ Kramsch & Dimitrovova, 2008, p. 40-1.

To conceive of Euregionalism in terms of a self-organizing system means to analyze the specific processes of signification that link together various actors and objects, as well as (parts of) the physical space represented on the maps of Euroregions. This approach entails a much more open definition of regionalism: one which does not assume that the existence of institutions with a particular spatial perimeter necessarily implies some form of territorial governance, circumscribed regional polity, and/or functional coherence of that bounded space. Rather, we argue that the significance of (the cartographic representation of) spatial boundaries, and that of the boundaries of Euroregions more specifically, is a matter of empirical observation. That Euroregions are products of a European policy does not mean that they necessarily function in a direct hierarchy of decision- and law-making. We aim to demonstrate that an analysis in terms of a self-organizing (Eu)regionalism provides a further and alternative insight into the peculiar nature and manifestation of Euroregions.

The chapter is structured as follows. In the first section we offer a brief critical overview of the dominant state-territorial understanding of Euroregions. Subsequently, we attempt a reframing of regionalism within the perspective of Luhmann's concept of self-organization, aided by key insights from Peircian semiotics, and the implications of these for thinking space(s). In the third section we apply this lens to Euregionalism. Finally, we conclude by discussing how a view of Euregionalism in terms of self-organizing systems helps us to come to terms with the paradoxical nature of Euroregions.

5.2 A short review of scholarship on cross-border regions

The increasing scholarly attention for cross-border cooperation in the European Union from the 1990s on has been closely linked to or, in fact, has followed, the proliferation of bodies of cross-border cooperation 'on the ground', in particular that

of Euroregions.³¹⁵ As it has been much discussed, following negotiations over the Single European Act and the associated completion of the Single Market, the reform of the Structural Funds in 1988 created a distinct EU regional policy and prompted the setting up of the Community Initiative Interreg in 1990.³¹⁶ Following the launch of Interreg, Euroregions have been formed through the collaboration between sub-national authorities in contiguous areas along member state borders, sometimes with the participation of other public agencies, associations and chambers of commerce.³¹⁷ Particularly along the borders of western-European countries, these Euroregions often came as a replacement of pre-existing institutional arrangements, such as the Euregio, the example from introduction, which was established already in 1958.

Scholars concerned with the study of cross-border regionalism have tended to approach (the significance of) spaces of cross-border cooperation (i.e. cross-border Euroregions) as new territorial scales.³¹⁸ Jessop argues, for example, that "[t] he construction of cross-border regions as an example of microregionalism is best related to the more general rescaling of economic, political, and social processes.³¹⁹ In a similar manner, Perkmann proposes to interpret the formation of Euroregions in terms of the construction of new territorial scales, based on the argument that Euroregion-building has implied the "establishment of governance functions at a scale that is different from where they were previously situated".³²⁰ Commonly, accounts of cross-border Euregionalism in terms of state rescaling have also included a map showing Euroregions as territorially delimited entities, cross-cut by

Also referred to as Euregios or Euregions, see Scott, 2000.

³¹⁶ Dühr et al., 2010.

³¹⁷ Perkmann, 1999.

³¹⁸ E.g. Jessop, 2003; Johnson, 2008; 2009; Perkmann, 2007; 2007b; Popescu, 2008.

³¹⁹ Jessop, 2003.

³²⁰ Perkmann, 2007, p. 256.

national border(s), with the different subunits that belong to different nation-states being marked with different colors.³²¹

While applying the lens of rescaling (of governance) and depicting Euroregions as bounded spaces cross-cut by a border (borders) seems at first plausible, scholars doing so have generally struggled to unambiguously assess whether and to what extent 'the Euregional' is a meaningful territory/ territorial scale. To refer to Perkmann: "[e]ven in those cases where cross-border agency has been successfully institutionalized, it appears premature to attribute the characteristics of a 'region' to these entities". 322 Similarly, Popescu argues that Euroregion-building is hindered by "scalar conflict of territorial logics" and that due to the resistance from nation-states to grant exemptions from national regulations, Euroregions are unable to become integral and meaningful territorial units.³²³ Rather, the example of Euroregions shows that "cross-border reterritorialization carries with it the inherent contradictions of Westphalian territoriality".324 This view is also echoed by Johnson, who, after remarking that "transboundary regions very visibly call into question the cloth and stitching of the Westphalian quilt of political geography", notes that "boundaries and nationalism are still perhaps the most formidable obstacles to integration". 325

Critics have found this territorial optics problematic for two main reasons. First, because it disregards that territory as a perfectly bounded and homogeneous space across which sovereignty (or another kind of authority) is exercised evenly is an ideal.³²⁶ Second, because such a view undermines the possibility to politically address (the implications of)

³²¹ See e.g. Johnson, 2008; 2009; Popescu, 2008.

³²² Perkmann, 2007b, p. 876.

³²³ Popescu, 2008, p. 431.

³²⁴ Popescu, 2008, p. 435.

³²⁵ Johnson, 2009, p. 177.

³²⁶ Painter, 2008; 2010.

networked aspects of spatiality.³²⁷ The same criticisms have been formulated concerning the 'search for *cross-border* regionality'³²⁸ that has, as shown above, tended to think in exclusivist territorial terms. Echoing Painter, Pikner remarked that "the flat and framed territory of the cross-border governance institution is a political and utopian project".³²⁹ According to Kramsch, such thinking is anachronistic as it ignores "the lived spatiality of borderlands and borderlanders, their capacities for adaptation, *bricolage*, and resistance to territorially institutionalized power".³³⁰ Elsewhere Kramsch also argues that the "regionally territorialized encasement" of cross-border spaces makes it more difficult to conceive of a more cosmopolitan politics beyond the territorializing logics of the nation-state.³³¹

In line with the above criticisms, we argue that the *modus* vivendi of cross-border regions cannot adequately be grasped if their meaningfulness is assessed against an a priori definition (however implicit) of regions as a (set of) social space(s) congruent with a given territory. Instead of setting the criteria for the meaningfulness of cross-border regions in advance, we should inquire how meaningfulness is being (re)produced. To refer to Antonsich's remark on the recent "explosion (i.e. the proliferation) of 'geographies'", 332 a conceptual framework is required that allows us to understand how meaningfulness is being (re)shaped in different registers. But even more crucially, in order to appreciate how cross- border regions have solidified, supposedly without challenging nation-state spaces, we need to acknowledge that the nation-state itself has no 'single geography'. As Painter aptly noted: "the conventional story of the state - that is

³²⁷ Amin, 2004; Massey; 2004.

³²⁸ Cf. Painter, 2008.

³²⁹ Pikner, 2008, p. 213.

³³⁰ Kramsch, 2010, p. 1012.

³³¹ Kramsch, 2007, p. 1587.

³³² Antonsich, 2009, p. 789.

unified, coherent, and territorially sovereign – is a story told by the state itself, and thus not to be taken on trust". ³³³ Even though this is common sense now, the scholarly focus on 'reterritorialization' and cartographic representation discussed above shows that conceptualizing the links between (multiple) regionalism(s), governance and borders is far from straightforward. We argue that the notion of self-organization as understood from the perspective of Luhmann's systems theory can usefully serve as the starting point for such a conceptualization. This is the issue the next section turns to.

5.3 A self-organizational concept of regionalism

The first step towards an 'open' concept of regionalism is to dissociate it from the political per se. This is already a difficult step given that the lion's share of the scholarship on regionalism has its roots in political and economic geography.³³⁴ Regions, however, also feature in spheres other than politics, e.g. tourism, climate science or biology. What is common to all regionalisms is that it entails the partitioning of space into delimited areas for system-specific purposes. In biology, for instance, the notion of the region helps to understand the differentiation of animal and plant species. Furthermore, regions can generally be (cartographically) represented and these representations help objectifying regions as frameworks for observation and intervention. As a result, regions can easily be inserted into particular (spatial) strategies, be it profit-making, understanding climate change or political decision-making (governance). What is important to remain aware of, however, is that even though representations of different regionalisms converge on evoking the idea of delimited (physical) spaces, in reality regionalisms show great variation concerning the way in which they actually affect and involve physical space.

³³³ Painter, 2008, p. 360-1.

³³⁴ Cf. Keating, 2003.

From the perspective of Luhmannian systems theory, any regionalism is the semantic construction of a particular system (or systems) and functions therefore as part of network of recursive operations that make up that system. We refrain from explaining the basics of systems theory here, ³³⁵ and emphasize only that the most basic operation of social systems is *communication*. More concretely, regionalism as a social system allows communication to orient itself towards a specific partitioning of space, e.g. in climate zones, planning regions, tourism destinations ('the Mediterranean') etc. The signification of these (and other) regions can only be grasped in terms of the (system-specific) motives that underlie their creation: climate zones make sense if we want to understand global climate, but not if we want to promote particular areas for tourism.

Van Assche et al.³³⁶ and Jacobs & Van Assche,³³⁷ in earlier applications and refinement of Luhmann's systems theory, have conceptualized the relation of systems and their environments – which includes physical space as well as other systems – as one of sense-making through the creation of social, spatial, and other concepts, where spatial concepts particularly aim at making sense of physical space. This leaves open possible connections to either politics, the economy, science et cetera. For the concept of 'region', we argue for such an open and *dynamic* region concept in order to explore how the concept itself is organized within an (evolving) system of communication (and thus observation) and how it shapes the very (physical) space it aims to represent.

Before introducing the concept of *self-organization*, to understand how physical space (including landscape, humans, animals, buildings, infrastructure etc) is related to sense-making through communication, we need to start from

 $^{^{335}\,}$ For excellent introductions, see e.g. King & Thornhill, 2003; Moeller, 2006; Luhmann, 2012a.

³³⁶ Van Assche et al., 2008.

³³⁷ Jacobs & Van Assche, 2014.

self-reference in communication. Following Luhmann, we regard social systems as being self-referential.³³⁸ This term expresses –as the term 'intertextuality' does in poststructuralist writings³³⁹– that present communication can be only understood against the background of earlier communication and is always a re-interpretation of it. In other words, the production of new concepts, new understandings, new semantics can be done only by means of self-reference and they are, therefore, self-organized.

An additional effect of self-reference and the differentiation of systems is that what is not part of the sequence of communication, necessarily befalls to the environment. It is then still possible to communicate about these things but they are then the external reference point of communication. As a consequence, in Luhmann's theory, this means that do not communicate, only communication "people communicates". 340 As a result of the self-referential nature of communication, people's communicative and cognitive capacities are a level of reality that is presupposed by the system rather than dealt with in communication.³⁴¹ The same can be said of the biochemical processes that provide energy, and of the laws of physics in general that make communication possible. For example, financial support is often indispensable for cross-border cooperation to take place, but once it is given it is not an ever-present, explicit subject of communication. Similarly, politics is possible on the basis of tax revenue. Now and again, this issue is part of communication. However, policymaking usually takes place with sufficient funds presupposed and, as communication, refers to its immediate object, for example its target group or problem field, as well as to other (pre)existing policies, such as its own precedents.

³³⁸ Luhmann, 1995.

³³⁹ Gregory et al., 2009.

³⁴⁰ Luhmann, 1992.

³⁴¹ Luhmann 1990:119-20.

Let us now turn to self-organization - a concept that Luhmann himself used on relatively few occasions. With respect to geography, however, we argue that it adds a crucial dimension to mere communicative self-reference, namely the spatiality of social systems. Egon Noe and Hugo Alrøe, 342 two scholars in agroecology, have pioneered this move towards self-organization by investigating the (socio-material) hybridity of farming systems. The objects or 'actants' - Noe and Alrøe use terms from Actor-Network Theory - involved in a farming enterprise, e.g. cows, pasture, paperwork, a farmer, relate to each other within a system of associations. Thus, there is a distinction between the organization process and that which is being organized, or even more precisely, that which comes into being within this process of organization. Whereas a farming enterprise may need schemes or flow charts in order to manage aspects of its organization, the organization of a region almost necessarily requires cartographic objects. The empirical analysis of regionalism as featuring a cartographically represented regional concept as well as entertaining relations to the physical space being 'encased', becomes more tangible by considering it in terms of self-organization. This conceptual move aspires to emphasize that, at any given level of scale, the representation of space can function as key part of that organization, guiding the way space can be observed and scientifically analyzed, economically exploited, (politically) governed etc., so that we are urged to shift the focus of scholarly analysis to the role, within the system (systems), of a given regional-cartographic representation an sich.

In the final step, we introduce the semiotics of Charles Sanders Peirce. The process of self-organization as a combination of self-referential communication and the organization of physical space (objects) may seem straightforward. However, the physical environment is a shared space, and various systems simultaneously observe it, with the help of different

³⁴² Noe & Alrøe, 2006; 2012.

(spatial) concepts, underwritten by different motivations. A cow may be the producer of milk in the one system, whereas it serves as an object of taxation for another. The link between these various dimensions –system, representations of space, and the physical environment itself– therefore needs to be further conceptualized.³⁴³

In semiotics, the basic approach is always to distinguish between 'signifier' (the sign) and 'signified' (something in the world) but this works only in a consensual world that remains stable while our languages map that world. As we have seen, a cow is not the same thing to everyone. Peirce's semiotics is based on the introduction of a third value, namely the interpreting observer: "A sign, is something which stands to somebody for something in some respect or capacity". 344 Agreement over what is signified by a sign, for instance the term 'Euroregion', is no longer assumed beforehand. Rather, with each observer, it is "framed in a perspective due to a reduction and construction made by the observer and affected by the interests and qualifications of the observer". 345 Objective reality is always mediated by such formulae and even though everything we do, in terms of communication, 346 is an attempt to negate this matter of affairs, it remains inevitable.

Peirce refers to this fledging objective reality with the term 'Dynamical Object', the objective reality that resides necessarily *outside* communication and termed dynamical because in need of signification *within* communication. As soon as the dynamical object is communicated about, it becomes an 'Immediate Object', an object bearing a specific meaning for an individual observer (zie Figure 6, p. 145). The physical environment, before the attribution of *regionality* is only that: a 'real' but (as yet) dynamic object. It needs

³⁴³ Noe et al., 2005; Van Zoest, 1978; Luhmann, 2012a, p. 51.

³⁴⁴ Peirce, 1994, CP; 2.228.

³⁴⁵ Noe et al., 2005, p. 5.

³⁴⁶ Cf. Luhmann 1995, p. 164.

representations, cartographic, schematic, linguistic, to become immediate but the way in which this transformation takes place depends on the observer. Finally, following Luhmann, we consider systems to be responsible for making interpretation possible and, therefore, enabling the actualization of different immediate objects from what is seemingly one and the same physical object.

The process of signification - what is taken as a sign and what is taken to be signified by it - is a self-organizing one. Nothing outside the system can dictate the various selections being made within this process. But, in the end, we can say that signification (meaning construction) aligns, and keeps (re)aligning the physical world with the system. So the selforganization of a system takes place at the level of 'meaning' rather than at the level of the concrete objects that are being mobilized by the system. Luhmann refers to this matter of fact as the system's 'operational closure'. 347 In other words, in a Peirce-inspired framework, we focus on the significance or the role of the object within a process of meaning construction, i.e. a system-internal semantic world residing over the physical world that is part of its environment. It is this process, a constant process of signification, which needs to be understood as the system, and not those physical objects being associated as a result of this process. The meaning of objects comes about through systemic self-organization, a process that never produces definite meaning but always temporal, and various systems may be operating simultaneously.³⁴⁸

Seen from the concept of self-organizing (communication) system, we recognize the relevance of drawing spatial boundaries, for (some) systems, e.g. with the help of a region concept, but also stress that systems are not necessarily delimited and second, that even if they are, the boundaries in question are historically contingent, distracting from the

³⁴⁷ Luhmann 2012, p. 34.

³⁴⁸ Noe & Alrøe, 2006.

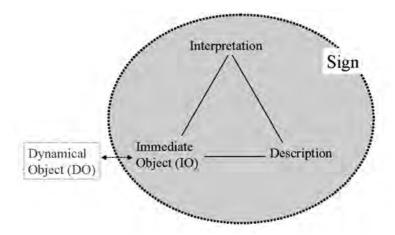


Figure 6 The relationship between dynamical object, immediate object, interpreter [observing system], and sign based on Peirce's semiotic (Noe et al., 2005).

co-existence of multiple systems that endow space with different relations at the level of meaning. The spatiality of a system, therefore, manifests itself as 'enrolling' in its network³⁴⁹ physical objects that are bound to be enrolled in other networks too. One can say that, in terms of their spatiality, self-organizing systems necessarily overlap. Importantly, when a self-organizing system establishes spatial boundaries, this does not imply that the whole physical space thus delimited becomes part of it. Rather, depending on the specific logics of the system, we need to analyze exactly in what way these boundaries function as reference points for that and other systems. The construction of spatial boundaries is thus but one and in no respect primary way in which the spatiality of a self-organizing system manifests itself. Systems involved in governance, for instance, mobilize physical objects, landscape structures, people etc. within the boundaries of their territory - note that we use the term

³⁴⁹ Cf. Latour, 2005.

'territory' only in relation to governance³⁵⁰ –and not outside of them (think of nation-state space). Enrollment of these elements occurs through various policies and the very program of representational democracy, for example, in which individuals become enrolled as members of the public.³⁵¹

The prime example of a system which establishes boundaries in space is politics, to which law may be seen as a corollary or, at least, a system that co-evolves. 352 A somewhat simplified definition of politics and law, from the perspective of systems theory, is that they are self-organizing systems, internally differentiated regionally.³⁵³ The principle of territorial sovereignty³⁵⁴ plays a further role in the exercise of power and the making of collectively binding decisions with recourse to virtual (often made material) lines in space that demarcate the sovereign territories. The historical evolution of the political and legal systems have taken these lines, once established, as reference points and even incorporated them in their self-understanding of nation and state. 355 The regionalism of nations, therefore, has very strong and historically established links with all aspects of governance as well as with cultural identification of inhabitants of the delimited territories.³⁵⁶

What has evolved historically as the regionally differentiated political system, however, is not, according to Luhmann, a collection of different *states* as individual systems.³⁵⁷ Rather, 'the state' is seen as a self-description of the political system, that is, politics describes itself as an

³⁵⁰ Cf. Elden, 2010.

 $^{^{351}\,}$ King & Thornhill, 2003.

³⁵² Luhmann, 1990c, p. 187ff.

³⁵³ Luhmann, 1982.

³⁵⁴ Kratochwil, 1986.

³⁵⁵ Luhmann, 1982; 1990.

 $^{^{356}\,}$ Cf. Van Assche et al., 2008; Jacobs & Van Assche, 2014.

³⁵⁷ Luhmann, 1990c.

actor, enabling the attribution of sovereignty and 'actors on the world stage' perspective of international politics. "[T]he political function system secures its own identity through such an understanding", so that "the political meaning of anything is revealed in its reference to the state". 358 As such, the concept of state enables orientation, role attribution, and self-understanding without being a system itself. There is, however, a degree of differentiation within the regionally differentiated political system into organizational sub-units that are concerned with territorially circumscribed units. Systems theory conceptualizes this as webs of multiple, structurally coupled, self-organizing (sub)systems, ³⁵⁹ aimed at different purposes, functioning on the basis of different logics, and hence relating in different ways to (what is referred to as) the national territory. By acknowledging that 'state space' is constituted by a multiplicity of interrelated organizations with each their own logics, systems theory avoids essentialization of the state as a 'monolithic' actor. Self-organization allows for a more nuanced view where one is not fixated at 'the' national border but where attention is paid to the many different boundaries that are drawn in non-overlapping ways to serve different functions. As such, the taken-for-granted idea of a single unified national space is set aside and attention is re-directed to how different self-organizing systems, which 'draw on' different scales and physical objects, among other things, are involved in the governance of 'the territorial nation-state'. Rather than conceptualizing such territorial subdivisions as actors (the nation-states), a systems perspective analyzes, at the level of its organization, what logics are involved and in what ways space becomes related to these different logics.

Finally, we return to a dimension inherent in any regionalism, as a result of positing spatial concepts which

³⁵⁸ Luhmann, 1990c, p. 136.

³⁵⁹ Organizations, cf. Luhmann, 2000a; Seidl, 2005.

produce spatial boundaries,³⁶⁰ namely that of cartographic representation. From the perspective of systems theory, the term 'region' is a possible ingredient of a spatial semantics.³⁶¹ Whereas there are also other terms to be used, such as area, place, land, country, or estate, region has taken on specific associations, historically, that make it different and uniquely suited to other than linguistic reference, namely cartography. But here we are dealing with linguistic representation of cartographic representation and, moreover, with a way of co-constructing borders as a corollary of the region, that cannot be achieved by linguistic communication alone. As may be clear by now, a Peirce-inspired analysis would stress that whenever one encounters a representation of the 'immediate object' of an area in space, in our case a cross-border region, we should not mistake it for that physical space itself, i.e. an objective reality that exists out there as equal for everyone. What is at stake is the role of the representation, be it a map, brochures, or section of an atlas, within a self-organizing system (or systems) that revolves around specific logics, sustained by specific material conditions that it, most of the time, silently presupposes. Self-representations understate the reality of the system, either by naming or visualization and, in addition, by using self-representations functionally as part of its operations, i.e. in communication to refer to itself. When everyone has seen it on the map, one can communicate about the Euroregion and the area the map refers to is directly implied mentally.³⁶²

³⁶⁰ Jacobs & Van Assche, 2014.

³⁶¹ Cf. Redepenning, 2006.

³⁶² Cf. Luhmann, 2012a, p. 87.

5.4 Cross-border Euregionalism as self-organizing system

In this section, we revisit the different dimensions of selforganization outlined in the section above, by reconceptualizing cross-border Euregionalism as a self-organizing system. The analysis consists of three dimensions inherent to selforganization: 1) the (material) preconditions of the emergence and operational closure of the system, 2) hidden assumptions and observational logics, which stem from the evolution of the system's differentiation, and 3) the way the system's operations impact on and mobilize elements in the physical environment. This analysis of the particular regionalism of cross-border cooperation - what we call Euregionalism - is informed by four years of fieldwork in Dutch-German and Dutch-Belgian border areas, during which we conducted interviews with public officials, followed media reports, studied policy documents, and attended numerous 'Euregional events'. The interpretation of Euregionalism as a self-organizing system is the result of inductive as well as deductive oscillation between conceptual (systems-theoretical) thinking and empirical observation.

Above, we discussed the 'disconnect' between the process of meaning construction through self-referential communication and the material preconditions that enable this process to occur in the first place (e.g. energy, participating individuals, a physical setting). When the process itself no longer refers to its own preconditions, whereas those preconditions are still key to its existence, the system presupposes them.³⁶³ One of the most striking examples of such a mechanism is the situation in which a process has been enabled by monetary spending.³⁶⁴ European Union (EU) regional policy has done this by creating funding schemes for cross-border cooperation and development,

³⁶³ Luhmann, 2012a.

³⁶⁴ Luhmann 1990, p.149.

most notably Interreg, spurring a considerable increase in cross-border cooperation projects. In fact, from the 1990s on Interreg has largely come to stand for the entire field of cross-border cooperation, especially since Euroregions became the management agencies for the funds.

Thus, one can say that Euregionalism is a result of the creation of financially weighty regional policy. From the perspective of communicative self-reference, however, this does not imply that Brussels decides. Rather, funding being the outcome of the policy-making process, what has emerged is a sphere of communication with a large degree of autonomy – at least for as long as funding lasts. Despite its organizational autonomy, the continuous renewal of the budgets has made sure that the practices and discourses of cross-border cooperation have institutionalized in a way a government agency would institutionalize, i.e. there are no worries about income or profit, like in a business organization, at least not to the extent that daily operation is geared towards it.

A lot can be said about the ease of access to Interreg funding. For example, procedures and funding criteria have recently become stricter, urging local administrations to hire consultancy firms to run funding applications for them or, in other cases, to withdraw from cross-border cooperation altogether. In the meantime, this has already led to discussions about the next funding period. Should the access to funding be organized differently so that it again becomes easier for local organizations to participate? So one observes a switch from 'business as usual' to 'minor crisis', i.e. where conditions of existence need to be taken in consideration. This, however, does not necessarily jeopardize the semantic world of Euregionalism but, rather, gives way to a temporary shift in modes of communication towards the organizational one, which focuses at the continuation of certain networks of public officials (organizations). It might occur that some of these networks do not survive because they have ignored their material preconditions for too long.³⁶⁵ Cross-border Euregionalism as a semantic world of cross-border integration, however, might be continued in other settings and as soon as a new round of funding is procured.

A similar 'presupposed' level of reality is that given the largely public funding of cross-border cooperation public buildings are rather straightforwardly arranged as the venues of cooperation-related events. The conference scene at the Dutch town hall presented in the introduction of this paper is a typical example. There is also an implicit consensus that the organization of such events will rotate among the actors involved. The expectation is that, when municipality A hosts this year's meeting, municipality B will host next year's. Public buildings' pliability to feature in Euregionalism's self-organization is more or less presupposed. At the same time, the continuation of such activities and the visibility of its meetings in public buildings, the accompanying call for participation to public officials, prompts cross-border cooperation as a political responsibility. But limiting visibility to conferences, meetings etc., means at the same time that it becomes possible to evoke participation of public officials 'on an occasional basis' rather than specifically employing public officials year round for cross-border cooperation. Events become agenda options which public officials are encouraged to attend, tolerating eventual neglect of their usual duties. This entire circulation of public officials and public buildings is presupposed at the outset as it does not interfere in any significant way with the way in which Euregionalism is discursively reproduced.

The second dimension of self-organization pertains to its logics. The underlying logic of Euregionalism is that financial incentives give a boost to cross-border cooperation and help overcome borders at a faster pace. As such, Euregionalism makes part of the system of EU regional (cohesion) policy, which is predicated on the assumption that structural aid to

³⁶⁵ Cf. Luhmann 1990, p. 151.

lagging regions will help improve economic performance. However, these assumptions concerning the causal relationship between funding and (expected) outcome (i.e. overcoming unwanted border effects) remain 'black-boxed'³⁶⁶ in the every-day discourse of cross-border Euregionalism at the local level. The (relative) lack of success of cross-border cooperation is then evidently not linked to these 'hidden' assumptions, but tends to be attributed to a lack of funding, the complexity and bureaucratic nature of the funding procedures, or to other deficiencies that could be addressed by a simple reorganization of the procedures. At the same time, the assumption that the public funding of cross-border cooperation leads to the overcoming of borders remains unquestioned.

There needs also to be some warranties against too much fundamental discussion about the roots of the business – against the risk that the 'black box' is opened. 367 This function is entertained by programs 368 which are based on the premises contained inside the black box. This pertains to the question of how Euregionalism is organized *formally*. Euroregions, strategies (the documents that can guide the attribution of funding to projects), projects, and procedures for application, are major examples of these. When there is discussion about the success or failure of cross-border cooperation, there will first be a discussion about these programs and how to modify them, usually leaving the basic premises of cross-border cooperation intact.

Arguably, cross-border cooperation projects are the *raison d'être* of Euregionalism. The various events related to cross-border Euregionalism (such as our own fieldwork experience) depend on cross-border cooperation projects taking place, as the deliberation about them virtually constitute the whole conference. Projects as such play a

³⁶⁶ Latour, 1987; Fuchs, 2001a.

³⁶⁷ Fuchs 2001a.

³⁶⁸ Luhmann, 2000a.

double role: they are both the intended product of cooperation (aiming to dismantle border effects) and the yardstick for measuring the success of cooperation.³⁶⁹ As a result of this ambiguous role, however, actors involved in cross-border cooperation become interested in cooperation for the sake of cooperation. They report positively about the results and do not challenge the underlying assumptions of cross-border cooperation discussed above.

Finally, let us consider the way in which the region concept implied by Euregionalism enrolls physical space and objects (including inhabitants of Euroregions), in their self-organization. As elaborated in an earlier section, regionalism, or the regional partition of space, within the context of political differentiation is important for the organization of common decision-making, i.e. the 'exercise' of territorial sovereignty.³⁷⁰ Although the rigidity and sharpness of nation-state borders originated in this process, this is no longer the only context in which regionalism is important. With the advent of nationalism, strong conceptual linkages between the ideas of community and space have emerged. The Netherlands is identified with the Dutch and Dutch territory. And so it became common to partition space into actually assumed existing (spatial) identities. Euroregions, even though there is no political assembly, no Euregional sovereignty, no Euregional law, represent themselves as spatial entities. But understood as a self-organizing system, what makes it seem more 'real' is the fact that it includes visual representations of its territory.³⁷¹ This self-description of the system promotes its unity (its 'realness') and visibility, as well as the possibility for other systems to refer to it in terms of geographical location. The functional element, i.e. the reference point, is the representation, not the physical space itself. The physical space such representations refer to is not necessarily affected.

³⁶⁹ Cf. Van Assche et al., 2011.

³⁷⁰ Cf. Kratochwil, 1986.

³⁷¹ Cf. Bateson, 2002, p. 30.

Both nation-state spaces and cross-border regions are constituted through the relating together of particular elements. Some of these elements overlap (such as public officials from various scales); some others play a role only in one. Understood as a self-organizing system, cross-border Euregionalism has a spatiality, but it is different from the spatiality of the 'traditional' institutions of the political system. The spatiality of Euregionalism is expressed in its manifestation at specific meeting places, like city halls, conference buildings, project events and so on, but vanishes subsequently as it lacks physical structures 'of its own', with the exception of its regional office. In addition, it involves a continuously variable group of participants. Cross-border cooperation offers a particularly good illustration for the way in which these two movements presuppose each other: cross-border cooperation can only take place in case of the presence of a border and, therefore, cross-border cooperation reproduces borders rather than challenges them.³⁷² The thin, hardly visible line that represented the border between the Netherlands and Germany in the powerpoint presentation's welcome screen also plays this double role, where the state border needs to be depicted shortly as 'evil' to be subsequently glossed out. Borders can be used to conjure up such symbolism which, however, makes the system avoid any real discussion on border problems - because it knows it cannot solve them - and proceeds to talk about the solution, that is, the Euroregion and cross-border cooperation projects.

When considering their functional role within the selforganizing system of Euregionalism, the spatial boundaries of Euroregions signify who and who cannot apply for Interreg funding but this seems to be about the only way in which the meaningfulness of Euroregions become clear to (some) inhabitants and, i.e. that its exact location matters and impacts on people's possibilities. In a strict sense, no or hardly any law is based on Eurogional boundaries, whereas the

³⁷² Jacobs & Kooij, 2013.

boundaries of a real polity may serve many functions, including taxation, the management of migration, spatial planning, et cetera. So the function of borders for politics and law is much broader and more diverse but politics and law are largely absent from the Euregional.

Continuing the discussion about the way in which systems self-organize the physical environment in ways fit to their systemic logics, we ask in what way Euregionalism assembles a public for itself, i.e. mobilizes a community of borderlanders, which might compete, in one way or another, with the public mobilized by a nationally organized political system. Generally speaking, Euroregions have great trouble assembling a public (an audience) for themselves as the awareness of their existence has remained continuously small among borderlanders.³⁷³ This then indicates a lack of relevance to the inhabitants of its territory of what Euroregions (can) do. There are two types of occasions that most explicitly confront people with Euregionalism. The first is events such as the example in the introduction but this is almost entirely restricted to public officials, cross-border cooperation project managers and team members, the consultancy business, and some researchers. The second type is manifestations and physical results of cross-border cooperation projects but, rather than endowing visitors with Euregional sentiment, they bring forward the concrete goals of specific projects and do not particularly impress as monuments of Euregionalism. This seems to be the case despite the fact that without European funding such projects would not even have taken place. But they do, and because of a number of translations between the request for funding and the actual work on the project, there is a functional disconnect between the two.

Euroregions do not function like polities. Still, they are political outcomes in their own right. Studies indeed conclude over and over again that Euroregions seem not to have any destabilizing effect on the organizations of the political

E.g. Strüver, 2005; Knippenberg, 2004.

system and the related constellation of politics, administration, and the public.³⁷⁴ They seem neither to compete for sovereignty nor for citizens' feeling of membership - to the nation, to Europe, to another region. How can the political existence of Euroregions be explained whilst at the same time rendered marginal? The answer is that they are incorporated in the existing political system, not as a scale where democracy functions, but as a unit that takes care of problems posed by borders. It therefore has a niche within the existing, regionally differentiated, political system. Witness to this state of affairs is the fact that Euroregions and cross-border cooperation are currently being treated as a matter of external affairs,³⁷⁵ effectively a section of the bureaucracy which firmly holds the world of nation-states and international relations in place.³⁷⁶ Increasing the bureaucracy of external affairs or foreign policy poses no destabilizing effect whatsoever on the territorial capacities of national governance systems. Rather, it is a way of fixing cross-border cooperation as something international and thus maintaining the national as primary reference point.

In that sense, the regionalism of EU-funded cross-border cooperation is regionalism disconnected from most characteristics either of the physical or of the social context of specific border areas. Some Euroregions indeed existed prior to Interreg and other European funding schemes but with Interreg they became enrolled in a different kind of logic, i.e. one based solely on the presence of a state border. It faces this paradox when it wants to influence actual decision-making. For example, one can make a spatial development perspective for the cross-border region, omitting the borders from its cartography. From the perspective of a borderless Europe, such a development perspective seems a leap forward, as well as from the point of view of integration and the development

³⁷⁴ Cf. King & Thornhill, 2003; Luhmann, 2000a.

³⁷⁵ Cf. Popescu, 2008, p. 434.

³⁷⁶ See Luhmann, 2012a, p. 9.

aims of Interreg but in terms of effectiveness and administrative and legal feasibility it poses a complication. These borders are crucial components of a number of organizations involved in the governance of nation-state territory, being instrumental to their proper functioning. A cross-border development plan that ignores these boundaries, risks being ignored by systems that require these boundaries as reference points. The alternative of omitting, namely explicitly thematizing, problematizing and re-interpreting these boundaries, might be more effective when the aim of a plan is to attract attention by and have some impact in decision-making. What does produce the sense of enthusiasm and successfulness of a plan without borders is the fact that Euregionalism as a self-organizing system provides the 'meaning space' for this. Thanks to its paradoxical logic, the system applauds the disappearance of borders and will continue to encourage, for example, the making of cross-border development perspectives, whilst at the same time remaining necessarily ineffective in terms of actual decision-making.

5.5 Conclusion

In this chapter we attempted to outline an alternative lens for understanding the emergence and functioning of Euroregions as a response to existing approaches in which such entities are compared on the basis of a (silently presupposed) model of region as polity. By combining systems theory with Peircian semiotics, we have reconceptualized regionalism in terms of a self-organizing process involving the construction of a regional concept that is not necessarily territorial, or akin to the regional concept of a polity. Within this framework, we undertook a general analysis of cross-border Euregionalism that highlighted its peculiar existence as an apparently competing or alternative spatial entity that has hitherto failed to emerge as a meaningful territory. Whereas it clearly embodies a logic which challenges borders, Euregionalism at

the same time requires borders to function, be it either existing state borders or the new borders that demarcate the Euroregions. The paradox involved herein requires that Euregionalism performs *as if* it is a polity whilst at the same time functioning as something else. We revisit some of the main insights that follow from our analysis.

State borders, which are supposedly challenged by Euregionalism, are important in many processes of governance, but this is fragmented across many organizations, which all relate to space, boundaries, and physical objects in different ways. Changes in meaning continuously occur - i.e. borders may become more or less important in certain respects - but the emergence of Euroregions does not specifically alter or speed up this process. Rather, cartographic representations of cross-border space can be seen as expressions of a parallel process of the emergence of a self-organizing system of Euregionalism, the survival of which depends on its finding its own niche, its own specific way of enrolling the physical environment without competing with existing regions municipalities, provinces etc. This involves representations of itself on maps but even though cross-border spaces are on the map, they seem to be unable to do much 'governance'. Like all systems, cross-border Euregionalism is constantly in flux, changing its focus and thematizing different projects, places etc. but with relatively little appeal to physical space. Cartographic self-depiction, a 'symbolism' of borderlessness, and a very limited functional meaning of the spatial boundaries of Euroregions hardly make a strong case for territoriality.

It is tempting to interpret the increased visibility of Euroregions, and other cross-border spaces on the map, as competition between polities. Indeed, the sense in which various scholars seem to imply the weakening of an existing territorial delimitation in favor of the increased significance of another, competing, territorial delimitation is striking. The emergence of new spatial entities, such as Euroregions, in such interpretations, is seen as challenging or having a 'de-

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territorializing' effect on existing ones. Thus, the emergence of Euroregions suggests a shift in the balance of power ('pulling sovereignty'). However, without taking into account the relation of any delimited space to one or more systems (or organizations operating with systemic logics), we are stuck only with the *suggestion* of such a shift in the balance of power.

In addition, speaking of cross-border spaces in terms of governance rescaling suggests cross-border territories have become or are in the process of becoming established as meaningful spaces³⁷⁷ but, at the same time, such a framing reproduces (even if unconsciously) state-territorial frameworks of spatial thinking and acting. 378 This is acknowledged by Christiansen and Jørgensen who state that "the complex of [cross-border cooperation] and EU regional policies is a confirmation of territoriality - which means, of course, that it implies the creation of new borders". 379 Admittedly, EU policies for stimulating cross-border integration need, in their current form, a boundary in space that functions as reference point in the communicative process of the attribution of funding. Mostly, however, the territoriality of cross-border Euregionalism is overstated. The boundary, and the space delimited by it, are only incidentally invoked as the result of the system exploiting a niche, posing few if any threats to 'traditional' governance organizations and the relevance of their associated territories.

Euroregions do not resemble political systems and their organizations, incorporating politics, administration, and a public. Rather, they are circuits of money, political delegates, projects, and cartographies that suggest a territorial reality. Even though any of these involve a specific space in which they operate, the crucial point is in the precise way they involve this space and the actual meaning relations

³⁷⁷ See e.g. Popescu, 2008.

³⁷⁸ Kramsch, 2002; 2003; Lissandrello, 2006.

³⁷⁹ Christiansen & Jørgensen, 2000, p. 68.

established with physical components of this space, including objects in the landscape, physical infrastructure, and people who live there. Our point is that, in this respect, cross-border Euregionalism is relatively toothless and does not interfere with 'national' ways of involving space. Popescu³⁸⁰ notes that "Euroregions along the latest EU borders constitute political transnational spaces situated beyond the territorial logic of either the nation-states or the supranational organizations, yet they are far from being autonomous political-territorial units in the world political system." Indeed, Euroregions as well as other networks of cross-border cooperation describe and present themselves in political-territorial terms, making use of visual and symbolic representations, but they necessarily remain powerless, precisely in political-territorial respect. As such, they are far from constituting 'transnational political spaces'. In Perkmann's three-fold typology of cross-border regionalism, namely political mobilization, governance building and strategic unification, 381 spaces of cross-border cooperation have yet a long way to go. They can only go this way in case international politics decide on a rescaling of the institutions of democracy. This unlikely event, moreover, would mean merely a redrawing of borders rather than moving in any way closer to Euregionalism's utopia of borderlessness. Therefore, it is time for scholars as well as Euregional officials to put aside their territorial self-understanding of Euroregions and start embracing borders.

³⁸⁰ Popescu, 2008, p. 435.

³⁸¹ Perkmann, 2007, p. 256.

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CHAPTER 6

Spatial Planning in Cross-Border Regions: A Systems-Theoretical Perspective

"There is nothing more difficult to handle, more doubtful of success, and more dangerous to carry through than initiating changes."

Niccolò Machiavelli

In the foregoing chapter we used Peircian semiotics as well as notions from material-semantic approaches to conceptualize the differences between physical space, regional representation, and functional region, notions which remain opaque in empirical planning practice. This provides the context for understanding the scope for steering the organization of space—spatial planning—which will be dealt with in Chapter 6, an article published earlier in the peer-reviewed journal *Planning Theory*.³⁸² The original abstract sums up the outcome as follows:

Most scholarship in spatial planning presupposes an established institutional setting, where a specific legal framework is in place, one is used to certain procedures and routines, and planning has a certain (national) history. In cross-border regions, however, this becomes problematic as different institutional settings clash. Combining systems and organizational theory, this paper constructs a theoretical perspective on planning, explicitly conceptualizing differences, i.e. boundaries, in institutional settings. This sheds new light on the prospects and realities of spatial planning across national borders. National borders double the complexity of spatial planning, and organizations working in cross-border spatial planning need to take this into account by acknowledging their own and others' organizational boundaries as well.

Whilst returning to our empirical object, completing the circle of theory development in this book, it should be mentioned that this chapter adds another important factor; it introduces a theory of world society. Furthermore, it attempts to bring world society into the analysis of regional planning practice, thereby answering to a criticism provided in Chapter 1, namely that scholars of spatial planning have been largely reluctant of considering this aspect and have restricted their analyses to regional policy discourse. In my view, world society plays a key role in understanding how spatial planning self-organizes and self-steers with what degree of success, in

³⁸² Jacobs, 2016.

addition to providing a perspective on the nature of territorial borders and the prospects for cross-border integration (of planning "systems").

The central research question being investigated in this chapter is: how can spatial planning be conceptualized within systems theory and what does this mean for the integration of different planning "systems"?

6.1 Introduction

Border areas, the margins of the national territory, have gained increased attention as an object of theorizing, most notably in anthropology, human geography, and political science.³⁸³ Planning theory, however, has to a large extent shunned contact with the phenomenon of border areas. This may be explained with reference to planning's focus either on the process aspects —communication, participation, inclusiveness, representation, power- or on national (or lower level) planning arrangements and practices, as the emerging national systems of planning in the 20th century also gave rise to a nationally specific tradition of planning education and research.³⁸⁴ As a result, much planning theory can be applied within a geographically bounded context that is already relatively well institutionalized as a result of a history of planning and public policy. To be sure, one can perfectly undertake collaborative planning efforts intended to deal with power issues and foster inclusiveness and legitimacy,³⁸⁵ however, any resulting spatial plan depends on the existence of political and legal institutions for it to be implemented. Sooner or later, planning has to deal with this external context, most often a context that is national. When involving various stakeholders in a planning project, much of

³⁸³ Jacobs & Van Assche, 2014.

³⁸⁴ See e.g. Davoudi & Pendlebury, 2010.

³⁸⁵ Cf. Healy, 1996.

this context is already known and present in the collective memory. The collaborative process takes places within this shared context.

Planning in cross-border regions, on the other hand, involves stakeholders embedded in divergent political, legal and, more broadly, cultural contexts. In the same way that these contexts are silently acting in the domestic setting, so too will they bear on what stakeholders bring to table in cross-border settings. Focusing the process on the spatial design usually manages to delay surfacing of the institutional differences. However, they are bound to cause problems at some point in time. If cross-border spatial planning is genuinely interested in implementation, the institutional differences will need to be taken into account by the planning process, and overcome.³⁸⁶ The fact that this takes resources and time, without any guarantee of success, is often a reason for withholding from common planning efforts in cross-border regions. Past experiences have caused disillusionment,³⁸⁷ most notably in border regions that are relatively urbanized and traditions of planning exist on both sides of the border.

To be sure, the topic of national, state-centered planning systems has been object of discussion for some time, now, in the literature on "European spatial planning" or the "Europianization of spatial planning".³⁸⁸ In this literature, however, one studies the problem from a prefigured solution, i.e. one involving Europe, or the European Union, as new planning scale. Lacking any power to make planning policies, what remains at the European level is a policy discourse, entangled with an academic discourse, on the alternatives for spatial planning policy. For instance, the European Spatial Development Perspective,³⁸⁹ territorial cooperation and its funding program

³⁸⁶ De Vries, 2008; Pijnenburg, 2019.

³⁸⁷ Knippschild, 2011.

³⁸⁸ See e.g. Dühr et al., 2007; 2011; Waterhout, 2007; Dabinett, 2006.

³⁸⁹ Albrechts, 2001.

in the frame of regional policy,³⁹⁰ or the travel and gradual adoption of "European" spatial concepts, like polycentricity, across individual member states' planning systems.³⁹¹ This shifts the focus from an understanding of why and how spatial and societal boundaries work³⁹² to the political project of transnational spatial planning by means of EU involvement.

What this chapter aims at, is to sketch out a theoretical framework for understanding spatial planning in cross-border regions, however, not as an episode of EU-funded cross-border cooperation but as ongoing attempts by all sorts of organizations to inverse the barrier effect of the national border and stimulate development on and across it. The main problem encountered here, arguably, is neither the lack of European spatial planning competencies northe shortcomings of territorial cooperation (funding) programs. Rather, it is the daily encounter with differences marked by boundaries both spatial and social (organizational). The framework sketched out here tries to untangle this encounter between organizations in spatial planning and the various types of boundaries. Leaning heavily, and trying to build further on sociological theory, rather than a possible normative direction, it needs to devote quite an amount of space to theoretical abstraction. This also means that the framework, presented here, may be applied more universally than 'merely' to the problem of cross-border spatial planning. In terms of its inspirations and examples, however, an important case to bear in mind is the border between Germany and the Netherlands, a non-militarized border area, where actually functioning institutional planning arrangements exist on both sides of that border. Between Germany and the Netherlands, we can find various examples of (forms of) cross-border spatial planning in the recent past and present, ranging from strategic urban and regional planning to site

³⁹⁰ Knippschild, 2001; Dühr et al., 2007.

³⁹¹ Davoudi, 2003.

³⁹² Cf. Jacobs & Van Assche, 2014.

and cross-border infrastructure development.³⁹³ Results of our own empirical studies are developed elsewhere,³⁹⁴ so here I focus primarily on theory construction.

The development of these contributions to planning and organizational theory is done on the basis of Niklas Luhmann's theory of self-referential social systems. This body of work already enjoys some applications to spatial planning but not to planning in cross-border contexts. In order to make this possible, we need come to a specific interpretation and adaptation of Luhmann's general theory that (re)conceptualizes boundaries. In this way, I aim to acknowledge the current interest for systems theory in planning and make further arguments in favor of its relevance.

First, we need to conceptualize planning as taking place within a wider societal context. As borders mark differences between a number of societal variables, e.g. law, language and culture, media, and political realities, ³⁹⁸ understanding planning in a cross-border context will be impossible without taking this societal context into account. Secondly, there is a need to conceptualize planning as a process dealing somehow with these societal variables as well as with actors/ stakeholders invited to and involved in the planning process. Even though important political actors are sometimes involved in cross-border planning, implementation remains difficult³⁹⁹ and, subsequently, hampering implementation is often explained with reference to the obstacles of the border, i.e. what we referred to as the societal context. So how to grasp the roles of these actors in the face of continuing border differences?

³⁹³ See for example Evers et al., 1999; Vonk, 2001, Pijnenburg, 2019.

³⁹⁴ E.g. Jacobs & Kooij, 2013; Van Houtum et al., 2013; Jacobs, 2012; Jacobs & Varró, 2011.

³⁹⁵ Luhmann, 1995; 2012; 2013.

 $^{^{396}\,}$ E.g. Van Assche & Verschraegen, 2008; Beck, 1986.

 $^{^{\}rm 397}\,$ E.g. Chettiparamb, 2007; Van Assche et al., 2014.

³⁹⁸ Knippenberg, 2004.

³⁹⁹ De Vries, 2008; Knippschild, 2011, Pijnenburg, 2019.

Third, the element clearly lacking in Luhmann's own work on systems theory, is the role of spatial concepts. We need to conceptualize the nature and role of spatial concepts used in planning across the border, as these imagine alternative spaces, with new boundaries, encapsulating pieces of two (or more) state territories. Euroregions are a well-known example. In general, these so-called cross-border regions are drawn up in order to enable the design of an integrated spatial organization across the border.

In order to offer a little more background, some more words on this topic. The need for a spatial planning that stretches across the border is felt by various academics as well as policymakers. 402 This presents itself as a result of the 'peripherality' of border areas, 403 underlined by self-perceptions of inhabitants and a general unfamiliarity with the other side.⁴⁰⁴ The border is seen as the boundary with an 'other', usually confirmed by differences in language and customs.⁴⁰⁵ Border areas may be sparsely populated or there may even be a move of population from this periphery to places perceived to be more central. Another peripherality effect lies in spatial policy and planning. Whenever development of the territory is coupled to spatial schemes, such as national spatial plans, everything is oriented inward. The delimited territory is being planned whereas eventual connections with the outside are just that: eventual connections. 406 Legally embedded spatial planning systems are often blind to what lies outside their jurisdiction. Innovations at the European level do not solve this problem. 407 Subsidies for Trans-European Networks

⁴⁰⁰ Redepenning, 2006; Kooij et al., 2014; Jacobs & Van Assche, 2014.

 $^{^{401}\,}$ Jacobs & Varró, 2014; Scott, 2000; Prokkola, 2011.

⁴⁰² Dabinett, 2006; De Vries, 2008.

⁴⁰³ See for example Knotter, 2002.

⁴⁰⁴ Szytniewski, 2013.

 $^{^{405}\,}$ Van Houtum & Strüver, 2002.

⁴⁰⁶ Eker et al., 2013.

⁴⁰⁷ De Vries, 2008.

(TEN-T), for example, contribute to development of cross-border infrastructure but often with disregard for the border area itself, like high-speed railway lines which connect capital cities rather than the cities along borders.⁴⁰⁸

Even though border areas across the world differ widely in terms of their cultural and historical context and, as a result of that, the nature of the problems that are perceived, borders do function in general as sources of peripherality and common obstacles. 409 The probability of spatial planning differs greatly across the world's border areas. The external border of the European Union, to name an example, is not a prime site for cross-border spatial planning activities. A first reason is that states have limited systems of planning or a general suspicion towards planning as a result of the relatively recent experiences with soviet regimes, making them uninclined to it. A second reason is the character of the external EU border as a closed border, where one needs visa or special permits for crossing, and where there is a high degree of militarization.⁴¹⁰ On the other side, the border between, for example, Germany and the Netherlands⁴¹¹ is a more or less open border, cross-border movement is a daily routine, and both states have extensive planning arrangements and incentives.

The first step in the development of a systems-theoretical framework, i.e. conceptualizing the societal context of planning, leans on earlier efforts of applying systems theory to spatial planning, most notably in the work of Kristof Van Assche and various co-authors. The particular consequences of territorial boundaries, however, need still to be brought into this perspective. For the second step, understanding how the

⁴⁰⁸ Jensen & Richardson, 2004; Eker et al. (eds), 2013.

⁴⁰⁹ Eker et al. (eds), 2013; Strassoldo, 1980.

⁴¹⁰ Bialasiewicz et al., 2009.

⁴¹¹ See Eker et al., 2013; Knotter, 2002.

 $^{^{412}\,}$ Van Assche, 2007; Van Assche & Verschraegen, 2008; Van Assche et al., 2011.

planning process deals with its self-organization as well as its complex societal context, we can borrow again from the sources mentioned above but, in addition, we make use of the work of Niels Andersen⁴¹³ on polyphonic organizations, which also takes its departure in Luhmannian systems theory. Finally, and as a third step, we bring all of this to bear on the cross-border setting, building further on pieces of theory developed elsewhere, which deals with the way in which spatial boundaries and social systems interact⁴¹⁴ and how spatial concepts, most notably 'the region', function as reference points in the planning process.⁴¹⁵ I intend to touch upon the most important dimensions of analyzing cross-border planning processes. Particular applications of this framework may highlight specific aspects above others, depending on the case at hand. Where possible, I refer to the literature that elaborates those aspects in more detail.

6.2 The societal context of planning

The first part of this chapter highlights the embeddedness of planning in wider contexts of legal, political, cultural and other 'systems' that are themselves the result of historical events and processes. Because planning in border areas struggles with this societal context due to its encounter with difference, it is important to conceptualize it with the same effort devoted to understanding the planning process itself. Instances of planning can only be seen as isolated research objects as far as they take place outside the world they are trying to steer. But even then, one would need to ask about the societal conditions that make such isolated approaches of planning possible. An important task of conceptualizing the societal context is to cast light on the discrepancy between

⁴¹³ Andersen, 2003.

⁴¹⁴ Jacobs & Van Assche, 2014.

⁴¹⁵ Jacobs & Varró, 2014.

the national and the global.⁴¹⁶ As far as we are organizing planning nationally or regionally, how are we going to understand the global dynamics of economy, demography, and the physical world? Finally, when so many processes extend beyond the boundaries of our political regions, what is the scope for steering? Let us start by locating spatial planning within the context of a society that goes far beyond the boundaries of nation-states.

6.2.1 World society

Responses of planning scholars to the perceived problems of spatial planning in the 21st century often revolve around the demise of modernism and its technocratic planning tradition, that is a government-led, science-backed, bureaucraticprocedural planning tradition. The necessary involvement of non-governmental actors, new environmental considerations, and the 'networked' character of contemporary society, leads scholars to argue for approaches that tackle 'complexity' or 'relationality'. We argue that this view is partly inwardlooking, seeing the problems of the planning profession from within the planning profession itself with an aim of solving them. Much literature, indeed, after sketching the 'transitional' situation of the planning profession, follows on to argue for specific ways forward, for example, associative democracy,⁴¹⁷ performance-based planning,⁴¹⁸ or collaborative planning, 419 a general tendency of the scholarship, even in the few cases dealing explicitly with cross-border spatial planning.⁴²⁰ The problem, however, is that these approaches fail to conceptualize 'the environment' of planning, that is, the societal conditions that make planning (im-) possible. So what if we look at planning from the outside in, starting

⁴¹⁶ Cf. Kessler & Helmig, 2007.

⁴¹⁷ Boelens, 2009; 2010.

⁴¹⁸ Hillier, 2008.

⁴¹⁹ Cf. Allmendinger, 2009.

⁴²⁰ E.g. Knippschild, 2011; Dabinett, 2006; de Vries, 2008.

from a theory of society rather than from the experiences within a policy sector in crisis? To this end, we borrow from sociology and political geography, i.e. disciplines lacking any straightforward connection to a national field of public policy. To be more precise, we will take our starting point in the thesis of world society, that is, the notion that societal complexity is no longer —or perhaps has never been—contained by the boundaries of nation-state territory.

According to the thesis of world society, posited by Luhmann⁴²² and his contemporary followers,⁴²³ the emergence and spread of dissemination media, such as writing, printing, and the electronic media⁴²⁴ has led to the gradual realization of a global reach of communication and, therefore, of a world society. Even though regional differences, for example in cultural customs and local histories, can always be found, major frames of understanding are shared worldwide. Language differences tend to keep alive the general feeling that society is something national, e.g. that there is inherently something *Dutch* or *German*, but proponents of world society argue that language differences are only superficial. Once translation occurs, the frameworks of understanding appear to be very similar. Even the idea of a 'western society' fails to account for our current situation, because even in China, there is science, economy, politics etc. following largely the same logics as those in 'the west'. Moreover, isolation from world society is virtually non-existent. The notion of 'the national' still has a function—one could describe this function as cultural—but it no longer explains our current situation and the problems of contemporary society. 425

The most convincing example is probably the discrepancy between national politics and the global dynamics of the

⁴²¹ Luhmann, 2012a; Stichweh, 2000; Helmig & Kessler, 2007.

⁴²² Luhmann, 2005.

⁴²³ Other examples are Stichweh, 2007; Albert, 1999; Thyssen, 2007.

⁴²⁴ Luhmann, 2012a, p. 187.

⁴²⁵ Luhmann, 2012a, p. 10; 2013, p. 289.

economy. Faced with a global financial crisis, there appear to be no national solutions. Similarly, spatial planning for economic growth only seems to work when the economy is already growing or, at least, when it is backed by state investments. The smoothly planned spaces of the Dutch landscape cannot convince global businesses to settle in the Netherlands when economic variables, such as labour costs, favour other options. The differences between such spheres as politics and the economy indicates what Luhmann has termed the 'functional differentiation' of world society. 426 Rather than society being subdivided into nations, we are faced with various global function systems, each operating on the basis of its own logics. Think of the economy, which aligns communication with profit-making, science, which is oriented towards the code of true/ false, and politics which -everywhere in the world- aims at collective decision-making and therefore revolves around being in power/ not in power. The *organization* of politics, however, is necessarily restricted by the need to establish boundaries in space, thereby prolonging the popular image of national containers of all things social. But from a systems-theoretical perspective, what we have is a political system unconvincingly trying to constrain and control things in such imaginative containers. 427

6.2.2 Regional differentiation

The way in which the political system differentiated itself on the basis of spatially bounded regions has to be understood as a transformation in society. Rather than the logical outcome of the historical process where tribes, inhabiting specific lands, were replaced by kingdoms, shifting and changing boundaries as a result of imperialism, colonialism and war, and ultimately by nation-states with stable territorial boundaries, the regional differentiation of politics needs to

⁴²⁶ Schack, 2000; Luhmann, 2013, p. 87.

⁴²⁷ Cf. Helmig & Kessler, 2007.

⁴²⁸ Luhmann, 2013; Kratochwil, 1986.

be understood as a result of inherent necessities of organizing the political process. These are, for instance, the need to make collectively binding decisions, which depend also on the construction of legitimacy.⁴²⁹ For this, one needs to establish a certain threshold of inclusion, i.e. not everyone can be part of this 'collective'. In addition, where many of these decisions lead to or are aimed at interventions in the physical environment it becomes even more important to establish boundaries. It is clear that the development of laws, partly coupled to ownership of land and property, supports and facilitates the regional differentiation of politics.

The boundaries of 'political regions' then become the stable reference points which enable the build-up of internal complexity within the systems of law and politics. 430 In other words, where sovereign spaces have been constructed and a principle of territorial sovereignty to secure the stability of these spaces, the reach of politics, in terms of what themes can be politicized, can be enlarged and the 'thickness' of law increased. That is, political decisions can be translated into laws and there are laws covering ever more ground. This process of formalization is often self-fulfilling, in the sense that laws lead to unintended consequences —because, for example, the economy operates according to a different logic and reinterprets law into its own terms— and bylaws may be created to deal with these 'side effects'. In any account, past political and legal decisions always play a role in the path-dependent evolution of the political and legal function systems.

The occurrence of so-called cross-border regions —of which Euroregions are a well-known example— should not lead to the easy conclusion that they represent a further step in this process of regional differentiation *of politics*.⁴³¹ In the first place, it is important to stress that differentiation is not a

⁴²⁹ King & Thornhill, 2003.

⁴³⁰ Cf. Helmig & Kessler, 2007.

⁴³¹ Jacobs & Varró, 2014.

progressive or teleological process. It is a systems-theoretical observation of the way society has evolved. There are neither predictions nor any logical endpoints to these processes.⁴³² But secondly, it is of major importance to pin down the political process, i.e. the making of collectively binding decisions translated into law, in these cross-border regions in order to see if we are actually dealing with further regional differentiation in politics. As we have shown elsewhere, this is not the case⁴³³ Euroregions make decisions but often they are 'declarations of intent' - of more cross-border cooperation, for example— or they pertain to the attribution of European subsidies. In addition, no Euregional decision-making is translated into law binding the inhabitants of Euroregions in some way or another. Border regions, therefore, seldom or never build up the internal complexity that facilitates actual governance, including forms of spatial planning which are backed by a network of (political) organizations and (legal) rules and procedures.

6.2.3 Steering and self-steering

If one accepts the thesis of world society and its functional differentiation, it is necessary to explicate in what way this restricts and enables forms of steering.⁴³⁴ Just to remind us, functional differentiation, here, should not be thought of as embodying the containers in which societal conduct can take place but, rather, as modes of communication that embody specific logics individuals and organizations can apply in communication and thought and which, in the process, necessarily evolve. These are logics that are embodied by many organizations and interaction systems⁴³⁵ and not monopolized or contained by specific organizations, e.g. science and the university, or politics and the state. Such an

⁴³² Luhmann, 2012a.

⁴³³ Jacobs & Varró, 2014.

⁴³⁴ Schirmer & Hadamek, 2007.

⁴³⁵ Luhmann, 2012a, pp. 227-230.

understanding of functional differentiation would be too narrow and instrumental. It is important to understand even function systems as modes of observation, i.e. perspectives on the world and ourselves, that are available as a result of (long) co-evolution, and among which we can switch, revealing the world differently from each of these perspectives.

One of the main consequences of functional differentiation, according to Luhmann⁴³⁶ and underlined by many others, e.g. Foucault, is the lack of a coordinating centre for society. Whereas earlier societies had known stratification as primary form of differentiation, "power" could be exercised hierarchically, with princes, kings, and emperors as all-encompassing rulers, functional differentiation entails a *heterarchic* starting point. The common-sense understanding of the political system as 'ruler' points to the difference between self-description, or the way politics is described within society, and the way it actually works, as observed from a social systems perspective.⁴³⁷ A good example is our demand of politics to solve economic crises. When the economy, however, is seen to be differentiated from politics, functioning on the basis of its own codes and programs, such control of the economy is illusionary.⁴³⁸ It will be hard to establish the causal links between economic policy, tax changes, budget cuts, and the actual performance of the economy itself. Often, policy will not lead to the intended outcomes. Therefore, we can describe the interdependency as reciprocal observation. Politics observes, on the basis of its own logics, the economy and vice versa. Political decisions (policies and laws) are re-interpreted by economic communication and the behavior of markets is re-interpreted by political communication. The quotation is not linear but involves irritation and irritability (sensibility of the system to what happens in its environment) and resonance.439

⁴³⁶ Luhmann, 1990c.

⁴³⁷ Kessler & Helmig, 2007.

⁴³⁸ Luhmann, 1990c; 2000a; Brans & Rossbach, 1997.

⁴³⁹ Buchinger, 2007.

Our understanding of politics as the steering center of society is incorrect. Even when the function of politics, including planning, seems to lie in the making of collectively binding decisions, the way in which and to what extent these decisions actually bind collectively, remains a matter of empirical observation. And indeed, just as political scientists and the media observe political decision-making and its successes or failures, politics itself observes its own decision-making and the impact thereof. 440 However, with the impossibility of any neutral mode of observation, these observations are necessarily guided by politics own codes and programs, and its own orienting forms are used in this process. In this way, observation and understanding of how society responds to political decisions, will always be associated to the decision-making actor, for instance, the state. But one understands by now that the idea of the state is invoked here in order to attribute effects of political communication (and decisions) to someone and thus create (legal) accountability.441

From the perspective of systems theory, spatial planning should be considered as a form of steering⁴⁴² firmly rooted in politics and law. Arguably, much of this steering is geared at financial investments either by individuals or businesses — building and buying of property— and, therefore, at the steering of the economy. By means of political decision-making it attempts to influence economic decision-making. As we have argued above, this entails a translation. First, for any spatial plan to have an impact, it should arouse irritation in the targeted system, in our case businesses would have to experience a loss of profit as a result of some kind of political decision, and/ or they would have to 'smell' opportunity for investment. Second, this irritation needs to be conceptualized within the economic system to come to understanding and

⁴⁴⁰ Brans & Rossbach, 1997.

⁴⁴¹ Luhmann, 1990c.

⁴⁴² Van Assche & Verschraegen, 2008.

action. Steering can never happen directly but depends on translation.⁴⁴³ In the end, social systems can only steer themselves.⁴⁴⁴ Planning policy can be changed by means of political decision-making, businesses can adapt their market strategy. All this depends on mutual irritation.

6.3 The organization of planning

Let us look in more detail at the way in which planning, as a form of political self-steering, is organized to deal with the matter of affairs described above. I argue for an organizationoriented approach, which focuses on planning as (temporary) form of organization. Organizations, rather than persons, acquire particular relations with the societal context in order to achieve their aims. This is the pivotal point in the cross-border situation, as the societal context gets more complicated, with conflicting law, differences in political allegiance, cultural misunderstanding etc., whereas in domestic settings organizations may function more smoothly because "partner" organizations are embedded in the same societal context. What is the type and form of organization that fits this situation? In other words, in what way does cross-border spatial planning differ from "normal" planning and how does it deal with the added complexity of the cross-border situation? Let us first define the notion of planning —and the planning system— from a perspective of systems theory.

6.3.1 The planning system

Using the same concept across different vocabularies can be somewhat confusing. To speak of the planning system, is to say nothing much without the necessary specification of what one considers to be the system. Usually, speaking of the

⁴⁴³ Brans & Rossbach, 1997.

⁴⁴⁴ Luhmann, 1997c; Van Assche & Verschraegen, 2008.

system falls well in line with common-sense understandings of politics, nation, and state, so that associations are easily made and the use of the term "system" does not require any clarification. In our case, however, the system concept is much more sophisticated and the idea of a "planning system", therefore, much more problematic. It seems necessary to elaborate on this difference. Where we discuss the planning system, we denote the co-evolution of regionally differentiated politics and law and the multiple, reciprocally oriented organizations involved in the organization of space, 445 where regional differentiation has to a large extent resulted in differences that separate the Dutch from other such planning systems.

However, the use of such a 'national' notion of planning system is pragmatic rather than extensive. It is much too simple to speak of a planning system if only to indicate a difference between regions (e.g. nation-states). Organizations involved in spatial planning form the actual object of research. The organizations involved in spatial planning are uniquely equipped to observe each other, thereby forming a highly irritable web of communications, with decisions in the one system easily leading to decisions in the other. Because of the apparent entanglements, an assemblage perspective would be tempted to speak of one system (one assemblage). However, this is problematic from the perspective of systems theory, because the organizations involved are operationally closed.446 The common achievements, in terms of actual impacts in the organization of space, that are the result of such webs of organizations' operations, serve as a common reference and orientation point for spatial planning so, when useful, one can refer to the planning system as doing all this work. Obviously, this entails an actor-based perspective that cannot be upheld in systems-theoretical analysis. Therefore, we must understand the planning system as a constellation of

⁴⁴⁵ Van Assche & Verschraegen, 2008.

⁴⁴⁶ Cf. Seidl, 2005.

organizations that incorporates the necessary perspectives, where an organization, moreover, should be understood as a communicational process rather than an actor.⁴⁴⁷ The set of organizations involved in the planning system changes continuously.

There is always a difference between the description a system maintains of itself and the actual autopoiesis of that system, 448 that is, the operations of the system as observed from a second-order, systems-theoretical perspective, in which these operations can only be communication. 449 In the case of the planning system, which, as explained above, is not really a system but a constellation of structurally coupled organizations, a description of the planning system can still be maintained, functioning as the basis for structural coupling.⁴⁵⁰ The different organizations, that each carry their own functional role, orient themselves by means of such self-descriptions, that is, a general self-description for the planning system and a more specific self-description for the individual organization. Self-descriptions or images of self are internally produced, for example, to guide interactions with clients, competitors and government, in the case of a business organization, and they do not necessarily reflect the features of its autopoiesis. To quote Van Assche et al.,451 "[t] he distance between image and reality can cause problems, but, just like in the case of the system/environment boundary, distance creates flexibility. 452 There is only one autopoiesis in a system, but the fact that this is partly beyond the grasp of its own interpretive machinery allows for a flexible construction of images of self. This, in turn, opens the door to

⁴⁴⁷ Luhmann, 2000b; Seidl, 2005.

⁴⁴⁸ Masuch, 1986.

⁴⁴⁹ Luhmann, 1995.

⁴⁵⁰ See Luhmann, 2013, p. 108.

⁴⁵¹ Van Assche et al., 2011.

⁴⁵² Bakken & Hernes, 2003; Seidl 2005.

a wider variety of developmental pathways.⁴⁵³ An organization can see itself as focused on scientific nature conservation, while in practice it has evolved in such a way that most decisions revolve around economic and political lobbying, or law enforcement or land management. This opens up more pathways than either a law enforcement organization or a scientific conservation organization would face."

Another dimension of self-description —and organizations' front stage appearance⁴⁵⁴— is obviously a point of orientation for other observers. Science offers a familiar example, where both self-description and other-description, most notably common-sense understandings of science, point to the idea of objective knowledge. In our case, we are concerned with the self-description of spatial planning, which is less straightforward. That is to say, self-description and common-sense understanding of science appear relatively stable over a longer period of time, whereas planning emerged more recently and has development pathways that are different across the political regions of the world. In comparison to science, spatial planning has experienced a turbulent evolution with changing self-understandings and role attribution within the wider political context. As touched upon in the introduction, planning in the western world has never solely been a sector of public policy. One notices the interconnections between, on the one hand, planning policy and law and, on the other hand, planning education and scholarship. 455 The locus, especially of the latter two, is also variable. For instance, the Dutch government employs a planning knowledge center, i.e. a 'scientific' council for the support of spatial policy-making. Much scholarship also originates here and overlaps with research done in universities. The selfdescription of spatial planning, as a result, greatly varies over time, where the policy process and its impact are almost

⁴⁵³ As with North, 2005; Ostrom 2005; Greif, 2007.

⁴⁵⁴ Fuchs, 2001a.

⁴⁵⁵ Davoudi & Pendlebury, 2010.

immediately scrutinized by scholars, and then accompanied by new self-descriptions or, often, guidelines of what planning should and should not be about.

Despite the turbulent evolution of planning's self-description, it should be emphasized that not all organizations are transformed when their semantics change. Dutch and all other planning systems bear the legacies of their own institutional history. 456 Indeed, 'hidden cores' will always remain there to safeguard at least the legitimacy of planning. 457 Many self-understandings no longer need to be repeated in communication but function as assumptions that participants expect each other to share. Some of these assumptions are probably not even actively considered by participants and, therefore, function more like presumptions, i.e. they are generally taken for granted. One may notice the 'buffered' character of the system, which enables flexibility in the margins and rigidity in the core. 458 The front stage performance of the planning system and its organizations is easily adapted, while the need for planning as such is seldom discussed. This applies to all organizations that are involved in planning, otherwise their involvement would become problematic.

6.3.2 Organization as system

Besides the continuous operation and importance of the legal (formal) planning 'actors', e.g. planning departments at various administrative levels, particular cases or planning projects involve project organizations, committees, working groups and so forth. Systems theory allows for a conceptualization of all these phenomena as 'organization', as it considers them as processes of communication, rather than as actors. Organizations thus consist of communication and they can only unfold themselves through communication and thus by

⁴⁵⁶ Cf. Nadin & Stead, 2008.

⁴⁵⁷ Cf. Luhmann, 2012a, p. 217.

⁴⁵⁸ Luhmann, 2012a, p. 226.

taking time. 459 An organization does not need to exist formally, for example by having statutes, in order to make a difference. The characteristics that mark organizations, as understood in systems theory, are that they 1) are marked by and orient themselves through decisions, 2) integrate various logics or societal perspectives (owing to the functional differentiation of society) and 3) establish membership some actors are included, others are left out. 460 All points very much relate to the functional differentiation of society. For example, expropriation and investment issues, tightly coupled to agreements that are legally valid, involve the economic function system. Decisions made in the planning process, at the same time, are necessary to provide the synthesizing moments that can be checked and held against the light of law and legal procedure. They, therefore, serve to immediately 'legalize' (make structural couplings with the legal system) the planning process. Much is done in order to guarantee that the outcome of the planning process is legally sound, including agreements among actors. The role attribution of actors in planning processes follows an exact legal logic. For example, public participation needs to be organized and a distinction in roles is established between decision-makers and public participants, where both can be held legally accountable with reference to these roles.

The systems-theoretical concept of organization entails the inversion of the common-sense understanding that sees people making up an organization. When organizations are conceptualized as consisting of communication, different persons may come to be included according to constructions of roles occurring in the process of communication.⁴⁶¹ When this organization 'system' consists only of its own communications, 'people' fall outside the system or, in other words, are part of the environment of the system. In the

⁴⁵⁹ Luhmann, 1995.

⁴⁶⁰ Andersen, 2003.

⁴⁶¹ Luhmann, 1995.

process of its communicative operations, the system selectively observes those people in their very specific roles. One can say that communication constructs its participants, human beings, which are observed by the systems as addresses of communication. The apparent a-humanism of such an organization (and system) concept has been criticized as being cold, insensitive to "agency", or even technocratic. Arguably, however, systems theory is especially fit to understand the role of human beings, as it does not pretend to know what they are, and resists the temptation of building grand social or theoretical designs on implicit notions of the human being. 462

The life of organizations is marked by decisions⁴⁶³ which form, as it were, an evolutionary path. An organization can emerge spontaneously (bottom-up) or can be the result of a political decision (top-down). In any case, when there are sufficient degrees of self-determination, its communication can become self-referential. Decisions made within that organization then come to refer to earlier decisions in that organization.⁴⁶⁴ In the course of the organization's communicative operations, a need for decision arises because it requires a clear point of reference for itself as well as for other systems. One can therefore regard decisions as the moments where foregoing communications condense or are, as it were, synthesized. 465 This reduction of complexity marks the progress of the organization and whatever it stands for but, at the same time, sacrifices many options that had existed before the moment of decision. The results of decisions, therefore, are never ideal. An organization observes the world after the decision, but only from its own perspective, and arrives yet at another moment of decision which can be understood as a re-interpretation of earlier decision(s) in the face of changing circumstances. 466

⁴⁶² Cf. Albert, 1999, p. 241; Fuchs, 2001b.

⁴⁶³ Luhmann, 1995; Seidl, 2005.

⁴⁶⁴ Seidl, 2005.

⁴⁶⁵ Cf. Andersen, 2003.

⁴⁶⁶ Seidl, 2005.

Taking the sequential and self-referential nature of organizations as a point of departure, it is also possible to re-interpret the notion of path-dependency from a systemstheoretical point of view. 467 Decisions made by organizations depend on earlier decisions, not in the sense of being determined by them, but in the sense of the necessity of re-interpreting them. This is especially so, because decisions usually have a formal dimension —they can be documented for reasons of legal validity. Institutionalization, including formalization, offers ways for organizations to increase their self-referentiality, usually at the cost of flexibility. But it means that it becomes easier for organizations to 'cooperate' with each other, because expectations are being stabilized in this process. It also means that it will become harder for an organization to change. 468 Given that societal circumstances do not radically alter very frequently, a planning system, understood as a constellation of organizations that observe each other and respond to each other in terms of their decision-making, may emerge with a high degree of institutionalization. Path-dependency can surface as rigidity⁴⁶⁹ when two or more of such systems are confronted to tackle the same problem.

6.3.3 Polyphony in organization

Society's functional systems, e.g. the economy, science, politics etc., do not make decisions. They are there to offer basic perspectives for observing and interpreting the world; looking at the world economically is not the same as looking at in terms of love.⁴⁷⁰ The functional perspectives, however, need to be embodied or acquire form in interaction systems—based on co-presence of humans— or in organizations.⁴⁷¹

⁴⁶⁷ Van Assche et al., 2011.

⁴⁶⁸ Self-transform, e.g. Seidl, 2005.

⁴⁶⁹ Cf. Van Assche et al., 2011.

⁴⁷⁰ Fuchs, 2001a; Luhmann, 2012a.

⁴⁷¹ Luhmann, 1995; 2012.

For this reason, organizations can be considered as social systems in their own right and, on the other hand, also embody the manifestation of function-systemic communication, thereby reproducing the functional differentiation of society.⁴⁷² Whenever an organization communicates economically, based on the code of payment/no payment, and bases a decision on it, both the organization itself as well as the economic function system are reproduced.⁴⁷³

Furthermore, organizations always have to deal with various functional perspectives. A planning project, for instance, involves the establishment of who has authority over what and who can make what decision, the legal validity of the project, its internal budget administration as well as economic considerations as to how to seduce certain actors to invest, and perhaps even some scientific knowledge informing the planning project of what could be outcomes of certain scenarios. The organization, in this short sequence, goes through a number of function systems: politics, law, the economy, and science. Niels Andersen⁴⁷⁴ has termed this phenomenon 'polyphony', i.e. speaking with many voices. A typical planning project is thus not only political. It involves various dimensions, which are all important to its success. Planning departments in universities, to name an analogous example, are not only scientific, they are certainly also economical, as they involve research budgets, and political, as far as funding for research may be the result of political decisions. Here, again, decisions come to the fore as the key moments shaping the autopoiesis of organizations. Whereas organizations are almost always polyphonic, and thus have a function of integrating society's various functional perspectives, it is their decisions that count as 'synthesizing' moments.

⁴⁷² Andersen, 2003.

⁴⁷³ Luhmann, 1994; Albert, 1999, p. 252.

⁴⁷⁴ Andersen, 2003.

One can consider contemporary planning episodes as being marked by the participation of a diversity of actors⁴⁷⁵ as compared to the technocratic planning tradition of the 1960s and 70s. However, the 'many voices' of polyphony refer not to actors but to the involvement of various rationalities connected to the functional systems of society.⁴⁷⁶ It may be the case that particular individuals are included in a planning project because they are seen to represent the government, business, or 'the public', but the success of the project, in this case, does not merely depend on the agreement among the participants. Inclusion of such 'representatives' may lead to successes for another reason, namely the capacity of different participants to bring in different logics that should be taken into account by the planning project. For instance, entrepreneurs may bring economic considerations into planning decisions, government officials may bring considerations of political power into planning decisions, and citizens may highlight certain legal consequences, i.e. nuisance, issues of property etc. that become incorporated in planning decisions.

6.4 The boundaries of planning

Spatial planning, as the area of public policy we are familiar with today, is a relatively recent phenomenon. Arguably, it emerged in the beginning of the Twentieth century and became increasingly formalized from the 1950s onward. As such, it has always taken existing territorial divisions for granted and, indeed, operated within the limits posed by them. Perhaps it was even made possible by the establishment of stable territorial boundaries, in the first place. The emergence and evolution of nation-states and their specific regional differentiation, however, is also a historical

⁴⁷⁵ Boelens, 2010; Albrechts, 2001.

⁴⁷⁶ Andersen, 2003.

event⁴⁷⁷ and its territorial borders, therefore, contingent. Complex planning systems internalize these boundaries in many ways. It is not just a matter of drawing alternative boundaries and looking at space anew —as in the case of cross-border regions. Effective spatial planning goes beyond spatial visioning, and in order for the spatial vision to have an impact, the regional differentiation of politics and law, in general, needs to be taken into account.

In this section, we will look at the evolution of the planning "system" as a result of co-evolving organizations —as social systems in the sense of systems theory— and its relation to territorial boundaries. We argue that, as a result of historical evolution, these boundaries, most notably state borders, have in effect become the spatial boundaries of the planning system.⁴⁷⁸ But there is another type of boundary which is of major importance to understanding the dynamics of confrontation between two different planning systems, and that is the system boundary.⁴⁷⁹ The system boundary does not exist in space but functions as a filter for observation and selection. 480 As different systems —different because evolutionarily separate— make different observations and, consequently, (communicative) selections (leading decisions), the system boundary probably is even more relevant to the problem than the territorial boundary.

6.4.1 Path- and interdependence

Let us look in more detail at the processes of institutionalization in the planning system. Each planning system carries along its own legacy in terms of formal and informal institutions that it has acquired in the course of its evolution, which means that in dealing with present challenges, it is restricted by path-dependency, defined as "rigidity in the

⁴⁷⁷ Luhmann, 2013, p. 283; Kratochwil, 1986.

 $^{^{478}~}$ See Van Assche et al., 2008; Jacobs & Van Assche, 2014.

⁴⁷⁹ Luhmann, 1982.

⁴⁸⁰ Kessler & Helmig, 2007.

development of an organization, institution or society, that can be ascribed to legacies from the past."481 Such types of rigidity can emerge when, for a longer time, organizations that make up the planning "system" mutually observe one another and adapt their identities and operations to each other. A stabilization of roles and expectations can take place. When, for instance, regional level planning agencies are used to do their work on the basis of spatial schemes issued every ten years by the central government, it may build on this regularity and formalize its operations as long as it lasts. In addition, laws may play a role in formalizing and rigidifying the process. To understand well the way in which spatial planning in one country differs from another, it does not suffice to describe the difference between these two planning systems, in an essentialist way.482 These are just the temporary outcomes of the highly complex dynamic of a web of organizations observing each other. One can possibly describe the path-dependency at the level of national planning systems, 483 but we should look at "interdependence" at the level of the organizations. A planning project, as the most concrete and, at the same time, temporary form of organization in planning, floats, as it were, on this bed of organizations, i.e. communicative operations, and will be very dependent on the ways things are done among those.⁴⁸⁴ "New institutions, e.g. new forms of environmental governance, can only take hold if they can be embedded in the web of interacting social systems that make up society, if they can be grasped by all actors in the present state of the system, and if they allow function systems, legitimate organizations and accepted actors to reproduce autopoietically."485

⁴⁸¹ Van Assche, et al., 2011.

⁴⁸² Cf. Fuchs, 2001a.

⁴⁸³ E.g. Nadin & Stead, 2008.

⁴⁸⁴ Luhmann, 2012a.

⁴⁸⁵ Van Assche et al., 2011.

Social systems, such as planning organizations, are the product of past encounters with their environments, 486 and their path-dependencies resulting from this process, can exist at the level of structures, elements and procedures. "They can reflect adaptations to organizations and/or function systems. For example, an organization can reflect former adaptations to competing organizations, but also to changes in the legal environment, in its decision-structures, its semantics (elements), its decision-style and procedures (procedure)."487 One could call this a tradition of planning but this seems too much focused on planning practitioners, in the light of the crucial wider embeddedness of planning in society. 488 So, rather, one could speak of a unique observational perspective a system has on its environment, i.e. what it observes as an object for spatial planning (and what it doesn't), how it defines this as what kind of problem, and to what kind of solutions it is geared to look. As such, one expects differences across countries and each planning system will have its own blind spots. It is selective in what it deals with as being planning. This path-dependent selectivity takes place at the system boundary.

In countries where the evolution of the planning system provides institutional room for strategic spatial plans, one observes a rich legacy of spatial concepts (semantics),⁴⁸⁹ including both general, e.g. campus, green heart, buffer etc., as well as specific concepts, e.g. Randstad, South Limburg, province, region etc. One applies specific abstractions (system-specific selectivity) of a delimited space in order to provide a guiding or integrating notion for specific interventions or projects. This may work successfully when the spatial concepts being deployed coincide with territorial boundaries, because one stays within a constellation of

⁴⁸⁶ Luhmann, 1995; 2000a.

⁴⁸⁷ Seidl, 2005, in Van Assche et al., 2011.

⁴⁸⁸ Cf. Buchinger, 2007.

⁴⁸⁹ Zonneveld, 2010; Kooij et al., 2014.

organizations that have co-evolved. In planning, one will often find that spatial boundaries and the areas they delimit play a key role in providing the common reference point to the various organizations involved.⁴⁹⁰ It doesn't mean that all organizations deal with these spaces in the same way but it *does* mean that they all deal with the same space. And on the basis of that, and as a result of co-evolution, they can complement each other in terms of what aspects they tackle and what roles they play.

In the organizational process, i.e. an organization going through the various functional logics and internal decisionmaking process, the mix of structures, elements (semantics), and procedures will appear to be highly dependent upon the societal context, most notably the political and legal context.⁴⁹¹ Making successful use, for example, of the campus concept as an element in regional planning, depends on the presence of a political discourse embracing such concepts as part of a search for economic innovation. 492 Because, in that case, the political discourse drives the making and changing of laws and policies towards a direction favorable for the use of the campus concept, so that these come to stand "on planning's side". Even though world society is real, planning finds itself still restrained by a societal (politico-legal) context that is quite national.⁴⁹³ Planning organizations respecting existing territorial boundaries and doing a good job of integrating their contemporary (national) politico-legal contexts into their decision-making, surely stand a bigger chance of being successful, i.e. making a difference in terms of a transformation of the organization of space.

⁴⁹⁰ Cf. Luhmann, 2012, p. 87.

⁴⁹¹ Cf. Knippschild, 2011.

⁴⁹² See Kooij et al., 2014.

⁴⁹³ Cf. De Vries, 2008.

6.4.2 Integration of planning systems

As argued above, regional differentiation has resulted in differences that separate planning systems in different countries from each other. They are used to observing existing (national) territorial divisions and are embedded in wider societal contexts that make their operations possible. Spatial design and strategic spatial planning can be effective precisely because of such embeddings.⁴⁹⁴ The result can be that the spatial organization of an existing territory, e.g. a national territory, becomes oriented upon itself whilst disregarding the situation across the border.⁴⁹⁵ The most notable example concerns infrastructure; the network of roads and railways often has a very national orientation. Partly this is due to planning, partly also because of a history in which borders had known variable degrees of openness, where cross-border movement was sometimes restricted. At present, however, one notices an increased sensitivity for the peripherality problems of border areas, especially within the European Union, where borders can be crossed freely. Looking at the map, one realizes the potential⁴⁹⁶ of better integration of the spatial organization across the border, perhaps to invert the peripheral nature of the area. Common efforts to achieve better integration, however, depend on the integration⁴⁹⁷ of (at least) two different, and differently embedded, planning systems.

From the perspective of separate evolutionary paths of the planning systems involved, with resulting differences between structures, elements, and procedures, an encounter between different planning systems is expected to proceed on the basis of fundamental misunderstanding. That is, spatial planning cooperation takes place with a common object—cross-border space—but that object may be understood

⁴⁹⁴ See Buchinger, 2007.

⁴⁹⁵ Eker et al., 2013.

⁴⁹⁶ Peyrony & Denert, 2012.

⁴⁹⁷ Nadin & Stead, 2008.

differently and, at the least, may be dealt with in a different way by each system. It is already historically unique that a development potential is observed from both sides of the border but when it occurs, this may signal an opportunity for cooperation. Cooperation also has a chance because the self-understanding of planning concerns its task of steering the organization of space. It doesn't have the more sophisticated image of itself that, for example, a sociology of planning would have, which locates planning within its wider societal context, illuminating its conditions of possibility. A narrow self-understanding seems to make it possible that one teams up with colleagues across the border and exchanges the traditional planning territory for a new, cross-border one.

The problem of sketching alternative boundaries, for example to arrive at a binational planning territory, is the lack of embeddedness of these boundaries in a political and legal context.⁴⁹⁸ Arguably, organizing a cooperation process that involves representatives of relevant (local and regional) governments who arrive at a consensus about more cross-border planning, will bring about some political embeddedness, but the legal embeddedness is still missing -what is also referred to as actors' institutional capacity⁴⁹⁹ - as is the support or involvement of citizens who can identify with the new entity.⁵⁰⁰ The existence of Euroregions, in the case of the internal borders of the European Union, certainly comes in handy as it supplies a common reference point and one doesn't need additional region constructs before discussing specific development potentials. They even suggest increased feasibility for common planning efforts, because they represent a certain degree of cross-border institutionalization.⁵⁰¹ However, also Euroregions have failed both in respect of providing legal embedding and involving

⁴⁹⁸ Cf. Prokkola, 2011.

⁴⁹⁹ Knippschild, 2011.

⁵⁰⁰ Kramsch, 2008; Peyrony & Denert, 2012.

⁵⁰¹ Cf. Perkmann, 2007.

citizens.⁵⁰² Planning then becomes a free-floating exercise which, by doing its design on the basis of non-embedded boundaries, risks isolation and, eventually, impact/implementation problems.

Could integration be realized by means of a higher authority? A quite recent discussion has been about planning discourse at European Union level influencing national planning systems or contributing to integration of national planning systems.⁵⁰³ Obviously, one can still continue this discussion in the sense of a policy goal. However, empirical analysis does not show far-reaching or lasting integration. Now and again, one can see co-occurrence of semantics across planning systems, for example when one adopts concepts originating in the European planning discourse, such as "polycentricity". 504 And also, legislation in other areas, for example nature conservation and/ or development, has prompted planning systems to consider the European but all this is a long way from integration and, in a systems-theoretical sense, merging of planning systems at the level of their organizations' structures, elements, and procedures, which remain closely tight to national political and legal factors. Even the regional policies of the European Union are more about funding than about law-making for Europe's rural areas. One can expect, therefore, and this has happened, that actors will capitalize on those funds but, as much as possible, for their own purposes. So as long as the European Union is not accepted as a super or federal state, there will always remain a possibility of funding cooperation initiatives but no means of fueling integration of the politico-legal context.

Finally, it seems that what is needed, from a systemstheoretical perspective, is the self-transformation —because transformation in social systems can only be self-transformation of planning systems. For organizations, and members, operating

⁵⁰² Kramsch, 2008; Knippenberg, 2004.

⁵⁰³ Dabinett, 2006; Waterhout, 2007; Nadin & Stead, 2008; Dühr et al., 2010.

⁵⁰⁴ Davoudi, 2003.

with the self-understanding of spatial planning as 'steerer' of the organization of space, there will be a possibility that misunderstanding or a different use of spatial concepts, will lead to irritations that may cause the other to self-transform. However, local organizations, such as a cross-border planning committee or a development project, always find themselves split between arousal from innovative ways of seeing, brought along by cross-border partnerships, and its societal embeddedness with structures, elements, and procedures that provide a (relatively) stable set of expectations and routines. Therefore, self-transformation with lasting impact on the degree of integration between two or more planning systems is very improbable. Self-transformation of organizations towards a cross-border spatial planning largely occurs at the cost of becoming more isolated and having less impact, whilst, at the same time, requiring more and more special (European) funding.

6.5 Discussion

In the above, we developed a systems-theoretical perspective on spatial planning in cross-border regions. The specifically complex situation of border areas demands an approach that goes beyond those familiar in current planning theory, as these are primarily actor-oriented and focus on finding ways forward for planning. ⁵⁰⁵ An orientation towards actors often results in questions of inclusiveness, power, or legitimacy. In cross-border spatial planning, experience has shown that it is not sufficient to gather the right actors, including those 'in power', and facilitate inclusive and fair deliberation processes with room for various rationalities. The difference is that actors involved in cross-border planning processes, as compared to 'domestic' ones, are embedded in networks of governance —politics, law, public opinion— with sometimes

⁵⁰⁵ Cf. Albrechts, 2001; Allmendinger, 2009, p. 220.

widely different outlooks on how and why planning works. It is not enough, however, to deliberate until one reaches mutual understanding because the path-dependent evolution of the constellations of organizations on both sides of a border will not grant the necessary flexibility to the planning process and, therefore, hamper implementation. The only way to get a bit closer to resolving this matter of affairs is to gain an in-depth understanding of the path-dependent operations of the systems involved. That is, one needs to become familiar with the other planning system, and the "double complexity" of the cross-border situation needs to be dealt with within the planning process.

In domestic settings it is still possible to operate with a self-understanding of planning as steering the organization of space because this is shared across the politico-legal context.⁵⁰⁶ In the context of a cross-border region, however, it appears that such a raison d'être requires steering of the steering of the organization of this physical space. This means that planning in cross-border settings requires a focus on the other's operational logic rather than a routine approach but to an alternative, cross-border territory. Organizations doing this, therefore, need to perform a balancing act between two planning systems. But rather than expecting or aiming at a transformation of planning systems, this balancing act would be more successful when playing with the existing rules. This also means emphasizing the existing territorial boundaries, instead of glossing them out.⁵⁰⁷ Paradoxically, the existing boundaries may need to become the starting-point of a crossborder spatial planning, because these are embedded in society and are capable of facilitating implementation. Governance systems, including planning, cannot be entirely flexible in their evolution, including attempts at selftransformation.⁵⁰⁸

⁵⁰⁶ Cf. Buchinger, 2007.

⁵⁰⁷ Prokkola, 2011.

⁵⁰⁸ Seidl, 2005; Van Assche et al., 2011.

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The scope for steering the organization of space, as a result of the above, is very limited. Steering possibilities increase when spatial planning takes a very narrow, development-oriented approach, for example single projects on a cross- border railway connection, nature reserve, or business park. The more strategic the approach will be, attempting to look at cross-border space in a more integrated way, the less will it be possible to embed this in the right contexts, consequently allowing a gap between the strategic plan and whatever will be actually developed. Often, developments will occur despite of any strategic planning, for example because of economic opportunities observed by business organizations. Nonetheless, strategic spatial plans may continue to play a role as monuments of cross-border cooperation, and it will still be possible to refer to them when discussing the potential of a more integrated cross-border region. In this sense, strategic spatial plans are not completely useless.⁵⁰⁹ However, they should be approached with some reticence as to their impact potential.

To conclude, the main aim of this chapter was to construct a theoretical argument in favor of an evolutionary perspective in the analysis of spatial planning, locating it in its wider societal context. This implies I could only scratch the surface in terms of criticizing the involvement of the European Union and the actual activities of cross-border cooperation. What hopefully does become clear is that a Luhmann-inspired perspective focused on societally embedded organization(s), yields new insights and innovative ways of looking at the dreams and realities of cross-border spatial planning and cooperation, more generally. Observations in our own case study work⁵¹⁰ do support the general "cooperation skepticism", but the core of this chapter is a theoretical argument deduced

⁵⁰⁹ Also see Albrechts, 2001.

⁵¹⁰ E.g. Jacobs & Kooij, 2013; Jacobs & Varró, 2014; Jacobs, 2012; Van Houtum et al., 2013.

from a body of work in (new) systems theory,⁵¹¹ organization theory,⁵¹² and other approaches sharing an interest in legacies of the past shaping current decision-making.⁵¹³ With all its shortcomings in terms of engaging with the many good and interesting arguments that can already be found in scholarship on cross-border cooperation and spatial planning, this chapter is, therefore, presented as an invitation for further debate. I believe it has contributed to a planning theory interested not so much in the improvement of practice and its results, but in a better analytical⁵¹⁴ understanding of spatial planning. Especially in European border regions, this perspective can help to put promises of e.g. territorial cohesion and cooperation, Euroregions, and European funding in perspective.

⁵¹¹ Cf. Seidl, 2005, p. 1.

⁵¹² Andersen, 2003.

⁵¹³ Cf. Van Assche et al., 2011; Van Assche et al., 2013.

⁵¹⁴ Sociological, cf. Jacobs, 2010.

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CHAPTER 7 Conclusion

"... planning theory offers no alternative to evolution theory. Evolution theory also deals with systems that plan themselves." Niklas Luhmann in Introduction to Systems Theory 515 ⁵¹⁵ Luhmann, 2012a.

The aim of this book has been to develop a theoretical framework for analyzing cross-border spatial planning from a general sociological perspective, which includes anchorage of this theory to a specific and coherent concept of society and the social. The foundation of this framework has been found in Luhmann's theory of self-referential social systems, which is based on the idea of systems paradoxically constructing their own reality by means of distinction and indication, de-paradoxification, and self-referential communication, a process in which social systems don't see their own blind spots. Paradoxes hide behind the continued operation of systems which indicate only one side of a distinction in order to base subsequent distinction and indication on it. Paradox is part of the 'sacred core' of a system⁵¹⁶ and systems themselves are unable to observe this without jeopardizing their own existence. The unfolding of a paradox, therefore, becomes a matter of second-order observation, a matter of scientific inquiry. Now that we have arrived at the concluding chapter of this book, I feel obliged to consider the paradox of systems theory as well, i.e. to reflect on the blind spot(s) of this study. Before doing so, however, in the next two sections I would like to stay on the indicated side of my distinctions and review 1) the main conceptual moves systems theory contributes to spatial planning research, and 2) summarize this thesis as 'a systems theory of spatial planning'.

Additionally, whereas much of this book is a theoretical exercise, the consequences for cross-border spatial planning practice should also be reconsidered. I will do this in section 3 by discussing, from a systems-theoretical perspective, 1) what lessons may de drawn from the EUphoric episode (1990s and early 2000s), 2) what may be the consequences of more or less comprehensiveness in spatial planning, and 3) how we could deal with the problem of the various levels of governance, involved in cross-border spatial planning. These

⁵¹⁶ As in the networks of Fuchs (2001a).

are not policy recommendations per sé, the provision of which is not a promise systems theory can make⁵¹⁷. I am aware, therefore, that the relevance of this book is mostly scientific, and will reflect on these and possible other blind spots in section 4. Furthermore, and in spite of its scientific relevance, what could be further avenues for research?

7.1 Conceptual moves of systems theory

After having reviewed a variety of theoretical ideas on borders, boundaries and spatial planning, in the foregoing chapters, I would now like to consider what is gained by reconceptualizing those themes in terms of systems theory. Systems theory and the writings of Niklas Luhmann have remained in the margins of the scholarship in the spatial disciplines. However, due to their clear links with constructivism and ever more English translations arriving on the market, there have been upsurges of systems-theoretically inspired research. So long as one considers the development of conceptually coherent, 'universal' theory a good thing, this book also has something to offer with regard to the reinvigoration of systems theory. I have chosen to summarize this in terms of four general aspects: 1) systems theory's radical constructivism, 2) its transdisciplinarity, 3) its uncompromising concept of the social, and 4) its grasp of world society.

7.1.1 Radical constructivism

A social system consists of communications, one after the other and, therefore, as a process with an *Eigentime*. Through communication, the system makes particular world constructions, different from those of other systems —even in the case where multiple systems are observing the same

⁵¹⁷ Luhmann, 1989.

⁵¹⁸ Luhmann, 2012a.

physical object, e.g. the declining population in a border area. The difference is in the particular ways systems construct that object in order to be able to make a difference to it.⁵¹⁹ For instance, planners (systems dealing with spatial planning) construct depopulation as a problem to be solved, whereas demographers (sub-system of science) construct it as a process to be explained, and so forth. So far, apart from the terminology, there is little difference with other post-structuralist approaches, like discourse analysis, deconstruction, or even actor-network and assemblage theory. What post-structuralism and systems theory have in common, is that they observe how others observe.

The conceptual negation of an objective (positive) reality is already quite radical but, in the social sciences today, post-positivism is an accepted position. According to many working from the post-positivist position, grand or universal theory belongs to the age of positivism. Factorized And indeed, the weariness of theory development with an aim for universality, comparability, and coherence, is clear. One rather leans loosely on post-structuralist thinkers, depending on the issue at hand. Critique is fashionable and 'critical' disciplines, like critical geopolitics, even more so. But doesn't this imply that one has to be critical beforehand? For systems theory, this doesn't make sense. It shares the radicalism of being constructivist but proceeds in the direction of grand theory, nonetheless. One might consider this even more radical. Fall

The real radicalism of systems theory is, of course, its embrace of paradox and tautology (social systems are true because they are not untrue)⁵²² and its readiness to apply post-structuralism to itself as well. As a sub-system of science, it has no privileged viewpoint from where reality can be described more legitimately than from elsewhere.⁵²³ It is as

⁵¹⁹ As in "the difference that makes a difference" of Bateson (2002).

⁵²⁰ Cf. Herrnstein Smith, 2005.

⁵²¹ Moeller, 2012.

⁵²² King & Thornhill, 2003, p. 21.

⁵²³ Luhmann, 1990c.

much a part of society as the economy, politics, and other functional systems, and is bound by the same necessity to draw a distinction in unmarked space.⁵²⁴ Whereas for some this implies the futility of positive social theory, for Luhmann this means the starting-point of theory construction. Were his sociological enlightenment,⁵²⁵ therefore, to succeed, we would have a sociology of politics, a sociology of economy, a sociology of art, and so on. We could even have a sociology of spatial planning based on systems theory. Making distinction and indication, paradox and tautology, the positive (objective) reality for systems theory, and because systems theory includes itself in this perspective, it is notoriously difficult to refute.

The radical constructivism of systems theory works in favor of an academic spatial planning discipline which distinguishes itself from planning practice and which, therefore, is better able describe the mechanisms of spatial policy in relation to perceived successes and failures and consequences to other societal spheres. This also holds for economic geography as far as entanglements with economic policy (politics) play a role in shaping research agenda's and outcomes. Radical constructivism implies reflexivity⁵²⁶ in science, that is, making explicit the hidden assumptions that may lead to de-differentiation of science and politics, for example, that there should be cross-border integration or that subsidies can contribute to cross-border integration. Obviously, this ought to be questioned rather than assumed. Unfolding paradoxes and uncovering tautology is not something that the political system does, neither is it at the core of economic communication. Therefore, the spatial disciplines in the science system, as far as they are based on radical constructivism, are clearly differentiated from the other functional systems and may act as their 'critical' observers.

⁵²⁴ Luhmann, 1995;2006.

⁵²⁵ Moeller, 2006.

⁵²⁶ Consider Evolutionary Governance Theory (EGT) in policy studies: Van Assche, Beunen & Duineveld, 2013.

7.1.2 Transdisciplinarity

It is difficult to stick with either theories in border studies or theories in spatial planning. In both disciplines, one finds very few dedicated theories. Indeed, one is even weary of such theories.⁵²⁷ The result is that both disciplines borrow extensively from social theory and philosophy, often depending on the issue at hand. Only a few scholars manage to comprehensively make this translation and, then, they often represent a sub-stream in the wider discipline, such as with Deleuze⁵²⁸ or Foucault.⁵²⁹ Systems theory is a universal theory, which originated in sociology —notwithstanding the various external influences it has to thank. In many of his writings, Luhmann positions himself in relation to debates in sociology. 530 Within sociology, however, Luhmann's systems theory is like DeLanda's (and others') assemblage theory in geography or Flyvbjerg's Foucaultian power analytics in spatial planning, a sub-stream of the wider discipline. Nevertheless, leaving familiar conceptions of society as human collective behind,⁵³¹ stretching itself across all scales, from interaction systems to (global) function systems, such as the economy, systems theory is as much a sociological theory as it is a theory of all social science, with potential application to all social phenomena.

Whereas it seems clear that more and more disciplines within the social sciences have welcomed scholars working with systems theory, it is not so clear if this will lead to a paradigm shift in sociology, which was the grand goal of Niklas Luhmann himself.⁵³² Rather, it contributes to fragmentation in the existing disciplines, including spatial

⁵²⁷ Paasi, 2011; Talvitie, 2009; Cooper, 2020.

⁵²⁸ DeLanda, 2006; Hillier, 2007.

⁵²⁹ Flyvbjerg, 2001.

⁵³⁰ See for example, Luhmann, 1980.

 $^{^{531}}$ A conception which makes it possible to put society versus politics, society versus the economy, or society versus science.

⁵³² He refers to it as 'Soziologische Aufklärung', see Luhmann, 2003.

planning, economics, political geography, and sociology itself, which remains attached to its various quantitative and qualitative schools. It would be just slightly too frivolous to found a new discipline, like *self-reference studies*, for this would require a very improbable process of actor-networking⁵³³ to lead to a successful outcome. Understanding systems-theoretical analysis as sociological analysis still seems the most logical way forward.

In the meantime, dissatisfaction with the de-differentiated status of spatial planning, has helped to create an opening for transcending the boundaries of some disciplines focused on (spatial) governance. Systems-theoretical insights play a substantial role in this development, which now goes under the name of Evolutionary Governance Theory (EGT).⁵³⁴ This is a clear opportunity for systems theory but the interaction between EGT and the present study are not explicitly elaborated in this book, because EGT is a rather recent development in social science, whereas the articles presented here were already well under construction or in the process of publication when EGT was 'officially' launched. Nevertheless, the evolutionary perspective it holds, aligns well with what evolution theory has contributed to systems theory. Evolution and co-evolution are key to understanding regional differences in the face of a society which is in principle global, in which the functional systems in principle are not spatially bounded.⁵³⁵ Not only spatial planning, being a discipline of governance, but also human geography, anthropology, and other social sciences could benefit from the evolutionary insights of systems theory.

In our analyses, transdisciplinarity enabled by the systemstheoretical lens, made it possible to consider sociological/

⁵³³ Cf. Latour, 2005.

⁵³⁴ Van Assche et al., 2013.

⁵³⁵ In Chapter 4 and elsewhere (Van Assche et al., 2011) we explore the evolutionary dimensions of social systems.

human-geographical phenomena such as unfamiliarity⁵³⁶ in relation to boundary mechanisms originating in world society⁵³⁷ and policy processes dealing with cross-border integration, 538 in the meantime taking into account development/non-development of the physical border landscape. 539 Only by following the transdisciplinary (nondisciplinary) avenue, did we come to an understanding of cross-border integration, including cross-border spatial planning, as systems operating with few links to either borderlanders or borderland space but with many links, however, to its own products, for example, cartographic representations of borderland space and discursive configurations among administrative officials. These systems are entirely self-referential, of course, but self-referentiality doesn't exclude external impacts on various planes. Irritation of other systems is possible; we have attempted to show to what extent this actually happened.

7.1.3 The non-humanistic concept of the social

According to Luhmann,⁵⁴⁰ "[e]ven today, action theoreticians argue —either against systems theory or with the intention of complementing it— that any explanation of societal change requires recourse to highly motivated individual action, hence localizing it (together with the individual agents?) in social systems. On closer analysis and, above all, with a better understanding of the individuality of organic-psychic systems, this is untenable." In line with the rather brief introduction above, I would like to highlight how systems theory offers an intriguing, perhaps anti-intuitive, but conceptually compelling view on individuals, actors, and agency, which is to relegate them to the environment of the social system.

⁵³⁶ Szytniewski, 2013.

⁵³⁷ Stichweh, 2000.

⁵³⁸ Perkmann, 2007; Pijnenburg, 2019.

⁵³⁹ Eker et al., 2013.

⁵⁴⁰ Luhmann, 2012a, p. 275.

Rather than saying that psychic systems do not matter to society —a moral statement— this presents a clear conceptual choice, which makes it possible to ask precisely how society and individuals can influence each other.

Luhmann's argument against action theory, elaborated also by others, 541 perhaps, better fits the sociological discussion of the 1990s. However, most current scholarship still has a very strong actor focus, including academic spatial planning and border studies.⁵⁴² Considering the literature in border studies, one finds, for example, borderlanders, 543 the European Union, nation-states, municipal administrations and Euroregions, all to be acting as agents. Even though this provides for compelling narrative, it gives us first-order observations incapable of explaining reality as anchored in modern society, which consists of communication, rather than actors. A practice turn in which action becomes collective action⁵⁴⁴ does not contribute to a more precise conceptualization of the interface between society and individuals. It often turns out that a focus on actors and agents is embedded in a moral (some say ethical) orientation on social-scientific inquiry, such as with Schatzki⁵⁴⁵ or Flyvbjerg, 546 who is better known in the planning discipline.

An actor-relational approach in planning,⁵⁴⁷ meanwhile, is posited as a response to the complexity of contemporary society, the demise of technocratic spatial planning, and the increase of public-private interdependencies. Even though this approach is presented as being inspired by actor-network theory, it has little to do with the non-human *actants* of

⁵⁴¹ For example, Stichweh, 2000.

⁵⁴² In The Netherlands, for example, Boelens, 2010; Pijnenburg, 2019.

⁵⁴³ Kramsch, 2010; Johnson, 2009.

⁵⁴⁴ Barnes in Schatzki et al. (eds.), 2001, p. 17.

⁵⁴⁵ Schatzki, 2002, p. 120.

⁵⁴⁶ Flyvbjerg, 2003.

⁵⁴⁷ Boelens, 2010.

Latour⁵⁴⁸ & Co., where *relations* determine the identities and capacities of actors. Rather, it draws lines between actors, i.e. organizations and individuals, identified beforehand. The main line of reasoning here is that it is no longer possible to follow a government-led and -run planning approach but, in the 'network society', need *real* participation by nongovernmental actors. A disguised argument for bottom-up approaches? In any case, the 'pro-activeness' of the actorrelational approach is, again, an idea on how planning practice should transform itself, rather than a new pathway into planning research.

In border studies, fragmented as it may be, the position on methodological individualism —the fancy term for taking individuals and agency and as elemental particles— is also ambiguous. One mentions, for instance, boundaries as psycho-social constructs, which seems to refer to an idea we have in our minds as well as enact collectively. This can then be put as an obstacle to cosmopolitanism and we end up with a societal critique and arguments in favor of democratic and egalitarian ideals —ideals academics are expected to share. In this situation, it is difficult to choose where boundaries as psycho-social constructs come from. Is it indeed our practices of bounding and bordering, or are there structural conditions, developing with the differentiation of society? Systems theory clearly opts for the latter position and leaves methodological individualism to psychology.⁵⁴⁹

As I see it, an example of misconceived methodological individualism, encountered in the beginning stage of this book's research, is the observation that planning professionals in border areas hesitate to draw in the territory of the other, as a result of a certain collective feeling of unfamiliarity, which is what inhibits cross-border ways of thinking. As an explanation of why there is not much cross-border spatial planning, such an argument fails to deliver, as I think we are

⁵⁴⁸ Latour, 2005.

⁵⁴⁹ Luhmann, 1995.

merely scratching the surface. From the perspective of systems theory, one would immediately point to systemic embedding of planning in a regionally differentiated political system, and the inherent volatility of cross-border thinking and map-drawing. Simply increasing, for example with the help of subsidization, the number of cross-border spatial visioning exercises by planners, or free-thinking artists for that matter, wouldn't turn this around.

7.1.4 World society

Finally, I would like to stress the role of Luhmann's (and others') theory of world society, which always looms in the background when embarking upon systems-theoretical analysis. Rather than a characteristic of systems theory itself, like its being radically constructivist, transdisciplinary, or non-humanistic, world society represents the outcome of Luhmann's own systems-theoretical analyses. Considering society in terms of self-referential social systems, the first question pertains to the differentiation forms of earlier and contemporary society. According to Luhmann, contemporary (modern) society is characterized by its functional differentiation. Society as a whole is no longer territorial, the functional systems operate worldwide, and an increasing number of problems perceived by society are of a global nature.⁵⁵⁰ Against this background, the tendency or perhaps even the necessity of the political system towards regional differentiation can be seen as an incessant source of unrest and seeming powerlessness. This is, however, the context in which systems-theoretical planning research takes place. World society is a reality deserving of conceptualization even in the most local of local spatial planning case studies.

The benefit of Luhmann's concept of world society is its analytical nature as opposed to a normative perspective, like we find in capitalism or neo-liberalism. Systems-theoretical research neither takes a stand for nor against modern society;

⁵⁵⁰ Stichweh, 2000; Luhmann, 1997c.

it is merely interested in explaining its mechanisms and outcomes. Seen in this light, it presents an analytical take on making science 'societally relevant', diverging at this point from particular 'critical' sub-disciplines of social science which, often also inspired by post-structuralism, entertain critique as medium for societal relevance. Again, we opt, with Luhmann, for an approach in which one rewrites (observes) society, and the social phenomena taking place within society, by means of clearly delineated analytical concepts, in this case: system, environment, self-reference et cetera. Even though the emerging perspective of a modern (world) society has been criticized, among other things, as being procapitalist, I must stress how Luhmann's notion of world society is an *amoral* outcome of analysis and does not aspire to argue for or against a certain ideal type of society. On the contrary, world society is seen as an evolutionary achievement and, as evolution does not end, it leaves open the possibility of societal differentiation models which we cannot presently foresee.

For the spatial disciplines, a functionally differentiated world society has implications. In the first place, it implies the possibilities of how society observes physical space, spatial patterns and processes, namely economically, politically, legally and so forth.⁵⁵¹ We tend to forget the strong influence of world society's observation modes because we are so familiar with them and they have become taken-for-granted. Indeed, there will always be boundary-transgressing discourse, for example, when aspiring to 'borderscape'⁵⁵² but systems theory tells us that present states of system differentiation offer both flexibility as well as rigidity in relation to newness.⁵⁵³ New ideas, new distinctions, need to unsettle and irritate precisely the already existing society and its subsystems. This will often fail. Nevertheless, the impact of

⁵⁵¹ We have given various examples of this in Chapter 4.

⁵⁵² E.g. Pijnenburg, 2019.

⁵⁵³ Also see Van Assche et al, 2011.

border work, activities in the margins,⁵⁵⁴ remains hard to predict, just like Luhmann's analysis produced the idea of functionally differentiated world society but fails to predict its successor(s). Herein lies the continued relevance of social science, being able to observe societal differentiation in light of (spatial) activities that challenge and possibly transform the status quo.

7.2 A systems theory of spatial planning

For a synopsis of theoretical ideas on spatial planning, taken and developed further from systems theory, I would like to review step by step the conceptual innovations made in the respective chapters. In addition to a summary of concepts, I would like to explicitly discuss the issues of identity (crisis) and complexity, which imply one another in the current debate on academic spatial planning.⁵⁵⁵ To my impression, planning has been looking to renew itself in the face of complexity already since the early 2000s and, recently, it has made its appearance in border studies,⁵⁵⁶ also as part of a renewal agenda. Nonetheless, the concept of complexity as such presently plays a central role in this debate and systems theory offers a very particular and insightful avenue through it.

In Chapter 4, we did not address spatial planning directly. Rather, we undertook a general analysis of borders and boundaries and refined them in a Luhmann-inspired framework. First, by shifting observation to second-order, we held that physical reality is not objectively known but only relative to an observer by means of this observer's distinctions; this is

⁵⁵⁴ Van Assche et al., 2008.

⁵⁵⁵ See for example De Roo et al. (eds), 2020. The idea of 'complexity' is also coined in border studies by Brambilla (2024), among others, arguing for a 'complexity lens' in the face of "borders as *complex textures*" (emphasis in original). Wille (2021) even goes so far as to proclaim a 'complexity shift' in border studies.

⁵⁵⁶ See Brambilla, 2024.

where we locate the construction of boundaries. There is, however, no guarantee —despite our inclination to evolution theory— that any first-order observations of physical reality are successful adaptations of the system to the environment. Observation implies path-dependence and blind spots; for example, where boundaries cut through economic, religious, or familial networks.⁵⁵⁷

We have distinguished between the boundaries of social systems and boundaries made by social systems. The first are never spatial; they cannot, for instance, be equated with groups of people; they exist purely as communicative selection, and are invisible to the observing system itself. The second type of boundaries are the constructions of systems, the (purposeful) distinctions made by systems in order to enable a certain relationship to the world. These exist within the system and can only be externalized indirectly, by shaping cognition and inducing physical action. Nonetheless, we have to assume a difference between the physical result and the boundary concept.

Every boundary arises from a distinction. At the level of theory, there is no difference between people and regions, for example. These distinctions have to be made first, so we can only observe that these distinctions are being made. This is the only thing we can be 'objectively' sure of. Therefore, the subsequent distinction we made in Chapter 4 between social, spatial, and conceptual boundaries, cannot be located at the level of ontology. In fact, social boundaries, like the distinction of an ethnic or cultural group, are also conceptual boundaries. They arise as a result of a system invoking a new or adopted concept. Spatial boundaries, similarly, are conceptual boundaries, because they arise as a result of a concept invoked by a system. The social and spatial categories are, however, so commonly distinguished in our daily lives, that we can safely use them as a point of reference with which everyone is familiar.

⁵⁵⁷ E.g. Pelkmans, 2006; Sahlins, 1992.

In Chapter 5 we further applied and refined the concepts developed in the foregoing chapter, by taking issue with the region phenomenon. We have roughly defined regionalism as the construction and maintenance, by social systems, of a regional concept projected on physical space. In this definition, regionalism is not restricted to those phenomena that literally call themselves region, such as Euro-regions or metropolitan regions. They can just as well include American Indian Reservations, national parks, or wine regions. They are all spatial concepts insofar as they refer to a specific part, rather than all, of physical space, and spatial concepts imply spatial boundaries. One can imagine, however, that some of these concepts (and their boundaries) are more vague than others, whereas some are more precisely delineated, making more difference to our lives, than others. It wouldn't be wrong to link this matter of affairs to an idea on the degree of institutionalization.⁵⁵⁸ So what we did in this chapter is develop some theoretical ideas, in line with the systems-theoretical framework of Chapter 4, on how some regions (and their boundaries) gain more weight and have more impact than others.

We made two innovations. The first one is to conceptualize institutionalization, as described above, as the self-organization of a system, which entails the production of structures as a result of its autopoiesis.⁵⁵⁹ We visualized the process as the construction of a network, similar to the actor-networking of Latour,⁵⁶⁰ in which heterogeneous elements, including conceptual elements like a particular region, are brought into relation with each other. It is important to stress that by the production of structures, we do not refer to this network as the physical results of the production process. Rather, maintaining the Luhmannian perspective, we refer to meaning structures, which are the selections of relations

⁵⁵⁸ North, 1990.

⁵⁵⁹ Seidl, 2005, p. 18.

⁵⁶⁰ Latour, 2005.

between elements. Every individual operation of the system, that is every communicative operation, has to make such a selection, and it has to repeat that selection in order for it to acquire structural value.⁵⁶¹ Planning necessitates linking region concepts to politics and law or, alternatively, to the economy. It can, however, only organize itself and depends on being able to irritate other systems to induce them to such links.

The second innovation becomes important here. This is to include a theory of observation in the conceptual framework. The semiotics of Charles Sanders Peirce are especially helpful in showing how this works. A sign, for example the Euroregion, does not simply signify an area overlapping a national state border, but it does so only to a particular observer, in a capacity that is specific to that observer —and not to others. With the term 'observer', Peirce pictures an individual human (psychic system) but in our context the observer refers to a (self-organizing) social system. The meaning structures built within a specific system precisely shape the capacity in which the sign is observed. For instance, planning organizations process the Euroregion as spatial planning territory, whereas business organizations deal with it as a potential source of subsidies. Thus, communication may refer to the same area in space, but imply lots of different other things, depending on the system reference.

Finally, Chapter 6 represents the outcome of applying concepts developed in earlier chapters to cross-border spatial planning as well as including a particular understanding of present-day world society in the overall picture. Shifting to the planning practice, meant I had also to conceptualize the *organization* as a particular type of social system, dealing with the societal context as it goes through its operations. Following Niels Andersen, ⁵⁶² I have used the term polyphony to denote how the organization, in addition to making

⁵⁶¹ Luhmann in Seidl, 2005, p. 18.

⁵⁶² Andersen, 2003.

decisions on its empirical object, processes the various binary codes of the functional systems of modern society as well. How well it does this, in part defines to what extent it achieves its goals. In any case, this perspective on spatial planning organizations locates planning firmly in its (world-) societal context. We are tempted now to give an impression of what planning looks like and how it operates, from the point of view of a Systems Theory of Spatial Planning.

Despite popular use of the term 'planning system', especially in the Dutch and German cases, there can be no one system which deals with spatial planning. Rather, our perspective shows it to be temporary configurations of organizations (social systems) dealing with issues of land use, floating amid a sea of other organizations, intertwined with the functional differentiation of world society. We may call this nested situation the embedding of the planning assemblage, but key here is how the individual systems continually evolve. By means of their internal self-organization, they produce structures for observing the other systems in the assemblage; a relation which is called structural coupling. It is usually reciprocal, so that evolution goes along with co-evolution. What I now call planning assemblage as an alternative term for planning system, is a very heterogeneous phenomenon, always in motion, and hard to pinpoint by means of analysis. I use it now only for illustrative purposes; within systemstheoretical analysis, the focus may be on the organizations in their societal context.

The regional differentiation of the political system, in which many planning organizations reside as sub-systems, makes spatial planning very dependent on territorial borders and also very much intertwined with law. It is due to regional differentiation that spatial planning has evolved to its current state of complexity. Perhaps it has even overburdened itself, considering its apparent identity crisis in the Netherlands. ⁵⁶³ In any case, planning organizations do not evolve out of

⁵⁶³ Van Assche et al., 2017.

nowhere. Their evolution is path-dependent, carrying their own past decisions with them, as well as inter-dependent with the evolution of other societal systems.⁵⁶⁴ The relative stability of regional differentiation, i.e. the world of nation-states, makes for a spatial planning with relatively high internal complexity, which also means many now hidden presuppositions and a high degree of taken-for-grantedness.

Spatial planning has an object which it wants to steer; decisions in planning organizations are geared towards steering. The steering of self-referential communication—planning organizations do not have direct access to either physical space or any possible human agents who should execute transformations in that space. In effect they can only steer themselves, which happens in a process in which the system perceives itself to be steering land use, observes the intended and/or unintended outcomes, and re-calibrates itself by means of further decisions. Also in this case they are restricted by path- and inter-dependencies.

Reference to physical reality, which is so essential for spatial planning organizations, is often mediated through spatial concepts,⁵⁶⁶ most notably concepts of region. The repetition of such concepts creates relatively stable structures, which enable the build-up of additional complexity surrounding the concept. This could also be law, unintended political decisions, economic significance et cetera. Spatial concepts also play a key role in organizations' structural coupling with other organizations. For example, different planning organizations may not entirely play the same role with regard to a certain region, however, the discourse about this region by one of the organizations, immediately sensitizes the other organization, which will evaluate if there is a need to respond, thereby already co-evolving.

⁵⁶⁴ Van Assche et al., 2011; 2013.

⁵⁶⁵ Van Assche & Verschraegen, 2008.

⁵⁶⁶ Jacobs & Van Assche, 2014.

In the above, I have mentioned complexity in reference to planning systems. Stable borders enable increasing internal complexity simply because structural coupling occurs between various subsystems of politics and law on the basis of borders as common reference points. It should, however, be noted that complexity, in the first place, coincides with world. That is, the world as unmarked space is fundamentally complex and dynamic⁵⁶⁷ before the advent of any social system. Subsequently, the synthesis of a system comes about by the drawing of a distinction, which at the same time reduces the complexity of that world —now the environment of the system— and builds up complexity inside the system. From here on, social systems, and the overarching societal system, may achieve ever more complex differentiation. As a result, yes, the world appears more complex, but only because increased internal complexity of the societal system leads to more diversity in observing that world. Referring to the complexity debate in academic spatial planning, I would argue that complexity has always been the driving force of planning, not just recently, namely in its attempt to reduce complexity —another paradox— in order to make possible the steering of physical space, spatial patterns, and spatial processes. Similarly, I would argue that the affirmation of complexity in border studies simply mirrors this increasing internal complexity of contemporary society, in which it possible to observe endlessly differing observations.

Boundaries —the operational boundaries of planning organizations and other social systems, but also the boundaries projected in space as a result of spatial concepts— are probably underestimated in spatial planning research, most obviously as complexity-reducing instruments. They are so taken-forgranted that their conditioning role is easily forgotten. It is, therefore, a good prospect that we will discuss this pivotal issue in the next section and it appears that our case of cross-border spatial planning indeed serves its purpose.

⁵⁶⁷ Cf. Peirce, 1994.

7.3 Consequences for cross-border spatial planning

In order to reflect on cross-border spatial planning practice, three themes may be put forward to offer some structure. First of all, there is the 'EUphoric' episode of the 1990s, which we have dealt with in Chapter 3, and which serves as a good starting point to a general conclusion. Secondly, there is the issue of comprehensiveness in planning, that is, the degree to which planning focuses on spatial development on (supra-) regional level or on particular sites, e.g. a business park. Thirdly, I would like to reflect on the issue of scale as far as cross-border governance scholarship often assumes scale, or levels of authority, as a priori categories of analysis. 568 This last theme has not been elaborated in the foregoing chapters. However, insights on scale and levels of governance follow logically from everything we developed and it is, therefore, of interest to discuss this theme as a contribution to the scholarship.

Before anything, I would like to offer a repeated disclaimer. There are more academic publications about cross-border spatial planning than there are actual practitioners and organizations which consider themselves to do cross-border spatial planning. This implies that the current book, and the various topical research papers and studies quoted throughout it, to a large extent create (enact) cross-border spatial planning as a field of policy. To be sure, when we started our fieldwork, in interviews we would often ask about cross-border spatial planning and get the response that such a thing not really existed. Rather, we appeared to be presupposed as a result of literature study. And, yes, certainly there are public officials who aspire to some enduring form of cross-border spatial planning as they are confronted with the shortcomings of the national and regional planning policies when it comes to the border area. But this aspiration knows only loosely coupled and temporary manifestations.

⁵⁶⁸ For example, Van der Giessen, 2014.

7.3.1 Lessons from the EUphoric episode

The 1990s can be considered the heyday of cross-border spatial planning between Germany and the Netherlands. Because both countries already had comprehensive planning policies and organizations, there also have been attempts at transnational coordination, for example, in the form of a Dutch-German Committee for Spatial Planning. Incidentally, when Schengen opened up the border for free movement of people and goods, the scope for transnational development seemed exponentially enlarged. In Chapter 1, we have somewhat condescendingly labeled the unfolding cooperation spirit as 'EUphoria'. Rather than intending ridicule, however, EUphoria means to say that the individual thinking and the organizational communication at the time stretched the boundaries of societal differentiation and, thereby, probed the flexibility of relevant systems, only to discover a few years later that society also knows rigidity. And this rigidity particularly seems to condense around territorial boundaries, that is, the regional differentiation of the political system, pointing to the structural conditions of cross-border cooperation and spatial planning as long as we remain bound to territorial states.

The beguiling ideas of strengthening connections across borders, and of flourishing economies as a result thereof, are something I have struggled with myself. It had been an implicit aim guiding our first few years of fieldwork, as it is, almost by definition, a good idea, which makes almost universal sense. However, in the course of working with systems theory as analytical framework, I had to concede to the irreconcilability of a political agenda and a scientific analysis. This is a direct consequence of systems theory because it uses second-order observation to analyze the study object. In other words, it does not adopt any normative position itself but, rather, it observes that its study object does so. In this process, it uncovers the contingency of that normative position, namely a contingency (path-dependency) upon its own history. For example, spatial-economic development

—quite a jargon term in itself— historically is at the core of spatial planning rationality and thereby shapes the mode of observation of the planning system(s), thus also in case they observe the border area. Only by means of second-order observation can one hold this fact against the light of other societal conditions, which may explain the outcomes of more or less successful planning processes.

The main conclusion with regard to why cross-border spatial planning fails, is different when we use a systems-theoretical lens. Whereas, for example, Pijnenburg⁵⁶⁹ points to a lack of "real willingness and political power to cooperate across borders", and notes that "[a]s long as the border is not perceived as an opportunity by all concerned parties, there will be apologies for failing to work across the border ...", systems-theoretical analysis highlights the structural conditions, if you will, of boundary-transgressing discourse.⁵⁷⁰ Those structural conditions are provided by societal differentiation, including the regional differentiation of the societal subsystems of politics and law. To my view, apologies for failure are therefore not in order. On the contrary, the public officials with experience in cross-border spatial planning, are remarkably able to explain why success, however considered, is hard to achieve —albeit from their own experience and unaware of theoretical concepts, let alone distinctions between first- and second-order observation. Pijnenburg mentions "a lack of legal power across borders, insufficient subsidies from political capitals, the current efforts to get engaged within new inland spatial governance arrangements, the difficulty to overcome other types of borders, the responsibility for cross-border cooperation not lying within the spatial planner's jurisdiction and differences in spatial planning systems and cultures." We know these explanations from our own fieldwork⁵⁷¹ and I expect they will reoccur in

⁵⁶⁹ Pijnenburg, 2019, p. 360.

⁵⁷⁰ In the sense of Jensen & Richardson (2004).

⁵⁷¹ See Chapters 1 and 3.

future case studies. Most are unsolvable as long as regional differentiation leads to increased complexity within the regionally differentiated subsystems. The call for more subsidies can be understood in light of the first-order observation of planning practice, which silently presupposes that cross-border cooperation works⁵⁷², and experiences a lack of time and resources needed to navigate the various obstacles encountered. Systems-theoretical analysis acknowledges that such processes revolve around the navigation of obstacles. However, it maintains that the obstacles cannot be solved, not even by putting in more subsidies.

There also cannot be any policy recommendations other than to take notice of the crucial role of territorial boundaries in limiting possibilities for transnational governance. The EUphoric episode has, of course, highlighted one particular solution to overcoming border obstacles, namely the glossing out of the national border, but not the only one. As argued, the political and legal approaches are very much constrained due to regional differentiation. However, there are functional systems that lack such territorial constrains, most notably the economy. Let us consider two consequences. First of all, differences across borders may be exploited for economic reasons,⁵⁷³ which some businesses certainly do, and which is also observed among consumers who shop across borders.⁵⁷⁴ At the political level, there may be some scope for manipulating these differences, for example through tax exemptions, thereby influencing economic decision-making in organizations. Secondly, the organizations in public governance should be considered, at least partly, as economic organizations as well.⁵⁷⁵ They may spend part of their budgets across the border, for example, when contracting for maintenance and construction of public roads and spaces, or public transport.

⁵⁷² See Chapter 5.

⁵⁷³ Jacobs & Kooij, 2013; Sohn, 2020.

⁵⁷⁴ Van der Velde & Van Houtum, 2000.

⁵⁷⁵ See Chapter 5.

It cannot be predicted whether these actions are first steps towards economically flourishing transboundary regions. However, they are already transnational actions themselves and they may lead to side effects.

7.3.2 Reflections on the comprehensiveness of spatial planning

The integrated (comprehensive) spatial planning of the Dutch and German traditions, in which various land use sectors are combined has the most problems in cross-border settings. Examples show that the feasibility of spatial planning at this level is marginal. Increased comprehensiveness means more 'sectors' are affected, and in each sector, cross-border coordination encounters double complexity.⁵⁷⁶ Especially when it is needed to bend laws and regulations, territorial boundaries will present stumbling blocks. For example, site development at the border, with the intention of offering occupants the advantage of choosing tax systems, garbage disposal systems, telecommunication systems et cetera, requires binational treaties involving federal and state governments, whereas the advantages, thereby gained, do not outweigh the economic and other disadvantages of moving to such a location. At the same time, there is some migration across the border, because (building) a house in Germany is often cheaper than in the Netherlands -an unintended reality which does more to cross-border integration than attempted incidences of cross-border spatial planning.

Less comprehensiveness increases the feasibility of cross-border spatial planning leading to spatial development. This is especially the case in rural areas where one is less dependent on economic activity, i.e. the attraction of businesses or investments from the private sector, and is less restricted by laws and regulations. For example, nature conservation and 'development' is largely publicly funded

⁵⁷⁶ See Chapter 6.

and, in addition, has possibilities for acquiring European funding. Nature areas on both sides of a territorial boundary may be connected to each other by means of sectoral coordination and, possibly, a few land transactions, where for example agricultural land is converted to nature -a transaction which is often provided for within the domestic policy context. Another example is the development of recreational (cycling, horse-riding, hiking) routes and the construction of cultural-historical storylines, which may be made visible in the landscape by means of signs, information boards, or even virtual layers accessible through smart devices. Admittedly, eventual economic development as a result of such transnational endeavors is hard to measure so, in addition to being less comprehensive, spatial planning here is also a lot more modest in its goals and self-description. Indeed, I wonder if many scholars would even consider these examples under the label of spatial planning.

There is also an argument to be made about comprehensiveness leading to futility when considered in terms of self-organization. Effective organization incorporates material elements which are pliable enough to conform to their designation within the organization process.⁵⁷⁷ Cross-border spatial planning in particular is observed as temporary process lacking much 'material' ready-for-use. For example, the (digital) maps and geo-information available is almost exclusively based on national territories, so that cross-border planning cannot easily make use of these resources. This also holds for other material aspects, such as dedicated office space and civil servants. In other words, transnational spatial plans lack the material support foundations that are available to the domestic ones; a reality which can only be changed by setting up all these institutions on the basis of a more or less continuous funding. Presently, in consideration of the structure of European funds and of the dynamics of political power, changing often in e.g. four year cycles, the making of

⁵⁷⁷ See Chapter 5.

transnational planning institutions is unlikely. Even if we are to see such institutions, or for example Euroregions are endowed with planning offices, it is likely that translation to politics and law remains hampered by territorial boundaries.

7.3.3 Leveling the scales of governance

At various moments in this book, attempts were made to de-Europeanize the way in which we look at cross-border spatial planning. This has not always been easy, because empirical cases are often intertwined with Euroregional rhetoric and, somewhat more tangibly, with European funds. In addition, many scholars align cross-border cooperation and integration processes with the idea of Europeanization. Multi-level governance studies, for example, considers the European Union as a new level of governance, which includes cross-border cooperation as one of its competencies.⁵⁷⁸ If there is one thing to be learned from our case study work and the work of many border scholars, it is that Europe fails over this enterprise. This, of course, depends on what one considers to be the goal of European cross-border cooperation policies. The main criticism is that the policy has a democratic deficit. Another argument questions the bureaucracy of the funding programs and the lack of results in terms of cross-border integration. We have argued repeatedly how the lack of 'results' should be attributed to societal differentiation and. in particular to, the regional differentiation of the political and legal systems. And therefore, I think these EU institutions act as a smokescreen to our scholar's eyes, making it harder to consider cross-border cooperation openly, that is, as temporary assemblages where the researcher has yet to discover what is being assembled. For this reason, I would like to finish this chapter by discussing the ill-conceived notion of scales of governance.

⁵⁷⁸ For example, Van der Giessen, 2014; Peyrony & Denert, 2012.

World society as understood by Luhmann and his contemporaries,⁵⁷⁹ is rooted in the idea that a transgression has taken place from stratified to functional differentiation. World society is not a hierarchical system but has a political subsystem which takes the role of making collectively binding decisions.⁵⁸⁰ Due to historical circumstances, the political system is regionally differentiated into states, federal states, et cetera, providing a self-description, also adopted by other systems, that enables political communication to take place. This situation also enables subsystems to be set up, which assume further partitioning of the territory, for instance provinces and municipalities. The self-description among these (sub-) systems is hierarchical but reality, seen from the perspective of second-order observation, is an assemblage of various structurally coupled organizations irritating and observing each other in a level-less plane of communication. Something 'new' like the European Union should, therefore, also be conceptualized as organization(s) within the political system, and not as a new level. The European Union as higher level government is a self-description of the political system. For those of us who use systems theory as analytical framework, it is not possible to adopt another system's selfdescription as ontology in the scientific analysis. Functional differentiation, moreover, implies that we should be open to study links between functional systems, for example politics, the economy, science, rather than only between subsystems of the political system.

The confusion over the scales of governance and levels of a particular hierarchy, surely is linked to our cartographical representations, where the European Union encapsulates the Netherlands and the Netherlands in turn encapsulates the Province of Limburg, for example. Every attempt at regulating an aspect of life in society by a political decision-making body (organization) is contested and gets only as far as other

⁵⁷⁹ Consider the work of Stichweh, 2000; Albert, 1999; Kessler, 2012.

 $^{^{580}}$ King & Thornhill, 2003.

systems allow it. For example, aspirations by members of the European Committee towards spatial-economic development of border areas, cannot be substantiated by any European law because of conflict with national laws and regulations. The solution, in this case, is to incorporate these aspirations into the EU's regional policy, which is a vehicle for redistributing (part of) member states' contribution to the EU budget to level out differences in the state of economic development between regions, including transboundary regions. 581 As a result, little of everyday life in the borderlands becomes regulated; only opportunities to obtain funds are offered, on a voluntarily basis, to those who are interested and willing to navigate particular conditions, which can often be met by means of the arts of rhetoric and bureaucracy. Scale, as in the European scale, was of relevance in contriving regional policy by considering the European territory at a larger and more abstract scale. However, the resulting ideas become translated and mediated locally whilst domestic laws and regulations come to the fore. Cross-border cooperation and spatial planning determine their own scale and certainly are not hierarchically confined. So a final insight about cross-border spatial planning is that it is not something European and, moreover, that it is not benefited by the role of Euroregions.

Why public officials in border areas are drawn to cross-border solutions remains an intriguing question. This is possible only by hiding the paradox of cross-border spatial planning, namely that for cross-border spatial planning to take place, borders are needed, and for it to be effective, it has to work with these borders, thereby reproducing them rather than helping to eradicate them.

⁵⁸¹ To this end, the European Union has established its own compartmentalization of the EU territory, overlapping with the Westphalian territorial grid.

7.4 Limitations of this study and ideas for future research

7.4.1 Blind spots

In these concluding pages of the book, I would like to reflect on an issue which I brought up already in the introduction, namely blind spots. Any line of thinking or communicating emerges from a process of making distinctions and indications, whereby it becomes selective in favor of the indicated side of each distinction and further distinctions. What it does not indicate, it leaves as a blind spot. In systems theory it is hard to say whether next to systems there is anything else, except the environment of those systems. Each system constructs its own environment, thus 'the' environment is not a phenomenon that systems theory can objectively acknowledge. This major blind spot of systems theory may be considered a disadvantage and it certainly makes a dialogue with other scientific disciplines focusing on 'space' and 'spatial governance' difficult. In fact, I would consider this a fundamental difference between systems-theoretical sociology and most schools of thought in the spatial sciences. Fundamental incompatibility implies a paradigmatic shift⁵⁸², which I do not foresee happening in the near future.

In addition to the adoption of the system/environment distinction, I have made a very clear choice to accept Luhmann's thesis of a functionally differentiated world society. As outlined in earlier chapters, I maintain that this thesis is an outcome of systems-theoretical analysis, that is, of observing society in terms of systems and their environments. This is an analysis done by Luhmann over the course of three decades, so it stands as *his* thesis anno 1997.⁵⁸³ In later years, various scholars, quoted in the foregoing chapters, have continued Luhmann's line of thought and have maintained the same thesis. However, this choice, which I also made, leads to more blind spots.

⁵⁸² See Kuhn, 1970.

⁵⁸³ Luhmann, 1997a.

One of the problems of working with a theory of world society is that it is hard to imagine the functional differentiation of society being in a transition to something else or society to be 'differentiated differently'. In this respect, it is important to stress evolution, not only of governance, but of society at large, as an inherent characteristic of the differentiation of social systems. Differentiation is evolution. Witnessing all sorts of de-differentiation cases, such as with planning practice and academic spatial planning, with science and morality or politics, with politics and the economy, the hypothesis that society is transitioning from functional differentiation to another form of differentiation, may be legitimately posited. But we don't know this because, fundamentally, systems theory is not able to observe the future.

A problem arising from a possible ambiguity in terms of society's form of differentiation is that the model of organization as polyphonic system (see Chapter 6) has to be reconsidered. In this model I have linked the successfulness of planning organizations to their ability to 'address' the various functional systems that are relevant, most notably law and the economy. If indeed, our reality is that contemporary society operates with a mix of functional differentiation and new forms of differentiation —which might as well be the case— the consequence for planning organizations has not been explored in this research. In this sense, for the present study, there are clear boundaries, observation of cross-border spatial planning practice is restricted by these boundaries.

7.4.2 Relevance and further research

Admittedly, this book comes after the fact. The fieldwork took place largely between 2009 and 2013 and the topic of cross-border spatial planning' brought me back even further in time, for the most alluring cases of said phenomenon occurred in the 1990s and early 2000s. Nevertheless, there are timeless lessons to be drawn from these historical data. First of all, the way in which planning organizations operate

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in the context of cross-border regions is exemplary for other areas of cross-border cooperation; one observes the same mechanisms of boundary navigation and steering towards results. Secondly, where my analyses ended, others continued to study cross-border spatial planning⁵⁸⁴ and looked at more recent empirical evidence, sometimes citing my publications⁵⁸⁵. Observations of these newer studies are in line with my own findings more often than not. However, they apply other frameworks from which they observe. In this book, I have connected to these studies here and there in the introduction and conclusion but it would be interesting to engage in a further dialogue.

In terms of making this research relevant to the wider scientific community, especially in fields like border studies, political geography, and academic spatial planning, I did not explicitly aim for a strategic approach towards a paradigm shift, that is, I did not try to make any of these disciplines more systems-theoretical. However, such a course may also be pursued, as I am convinced of the value of systemstheoretical research. This would entail an effort to irritate other scientific disciplines, which would require irritation strategies.⁵⁸⁶ It seems a strange line of thought because most scholarship relates the possibilities for change to the empirical object, aiming, for example, to change planning practice. This would also require irritation strategies, but I think one should be modest in one's expectations and, in any case, there is a great risk of blurring the boundary between science and politics and, thus, of de-differentiation.

Making a distinction between the empirical object and the theoretical framework, I would like to emphasize once again that the aim of this book has been largely on the side of the latter. In the various chapters (articles) different themes are

⁵⁸⁴ Primary examples include Durand & Decoville, 2017; Pijnenburg, 2019. ⁵⁸⁵ Chapters 3 to 6 of this book where published as articles in peer-reviewed journalis between 2013 and 2016.

⁵⁸⁶ Mölders, 2021.

elaborated in terms of how a systems-theoretical perspective would conceptualize and analyze them, e.g. success/failure, (cross-border) regionalism, (types) of boundaries, planning, integration. All these thematics, in empirical reality, may feature as each other's contexts. For example, planning is brought into the context of border regions and vice versa. Within the limits of this dissertation there can only be so many combinations of thematics and their contexts. However, the various thematics can also be brought into contexts which have not been dealt with in this dissertation. For example, the particular concept of spatial planning developed here may be brought into the context of infrastructure planning or, on the opposite side of the spectrum, bottom-up participatory housing projects. The thematics that have been re-conceptualized in this dissertation, in principle, may be built upon in order to study a variety of topics. In any case, every thematic that comes into consideration for scientific analysis will have to be reconceptualized within the perspective of the leading theory, in this case systems theory.

Finally, I think the concept of 'power'⁵⁸⁷ remains implicit in the analyses of this book but deserves a more thorough treatment. It might help to bridge the gap between systems-theoretical inquiries and other (critical) scholarship in the spatial disciplines. It might also contribute to the cause of irritating other systems. The code of politics is power/no power.⁵⁸⁸ Even though a scientific (theoretical) concept of power will be different from the (implicit) concept of power entertained by the political system, scientific analyses revolving around configurations of power and knowledge will have a greater potential of irritating and unsettling governance, stimulating its (self-) transformation.

For the above reasons, I believe this book has something to offer not exclusively to those interested in the issue of cross-border spatial planning but also to those who are

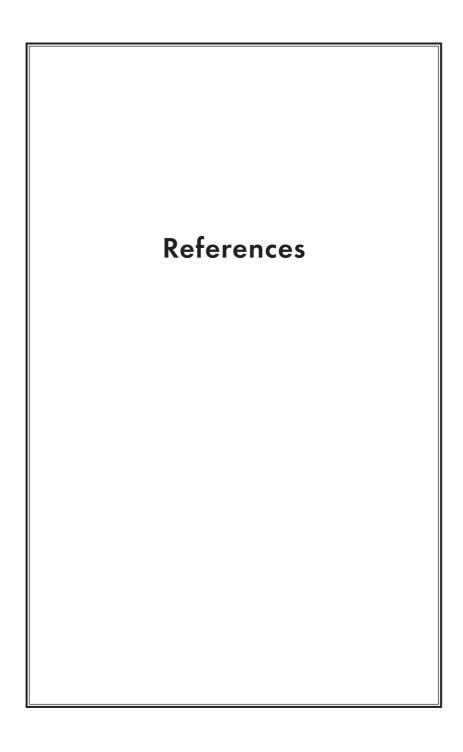
⁵⁸⁷ Cf. Flyvbjerg, 2001; Crampton & Elden, 2007.

⁵⁸⁸ Luhmann, 2000a.

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interested in other varieties of planning, to those who are interested in borders and border regions, those who are interested in regionalism *an sich*, those who are interested in understanding the way in which world society intermingles with our daily lives et cetera. In short, all thematics elaborated in this book may be significant to those interested in furthering systems-theoretical research.

Conclusion



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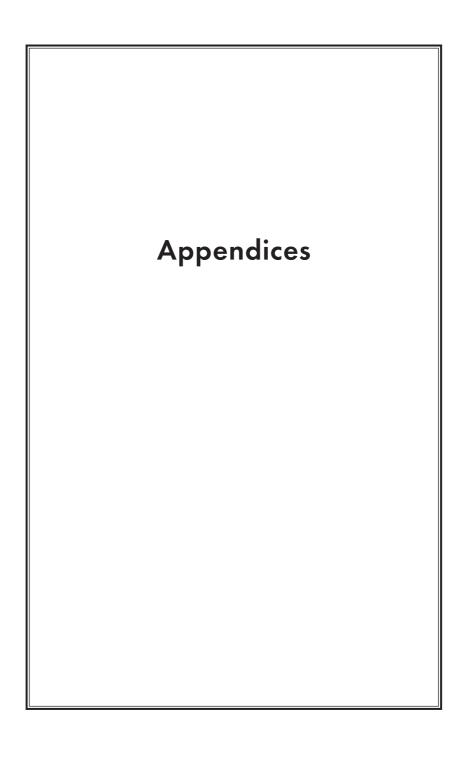
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Inleiding

Het idee van grensoverschrijdende ruimtelijke planning/ ordening (r.o.) is een antwoord op het gegeven dat natie-staten hun eigen ruimte ordenen en derhalve de staatsgrens als 'einde plangebied' beschouwen. Wanneer relevante organisaties aan weerszijden van een grens samen, integraal naar hun grensgebied zouden kijken, zouden zij kansen kunnen benutten om via ruimtelijke planvorming bij te dragen aan een meer 'functionele' grensregio, waarin meer integratie over de grens heen plaatsvindt, waardoor indirect ook de grensregionale economie gestimuleerd wordt. Kijkend naar de Nederlands-Duitse grens kan geconstateerd worden dat grensoverschrijdende r.o. in heden en verleden op verschillende manieren in de praktijk is gebracht. Met name in de jaren '90 zijn er veel voorbeelden van projecten, van strategische visies over een grote afstand tot ontwikkelingsprojecten op specifieke locaties langs/op de grens. De algehele teneur is echter dat deze projecten weinig effectief zijn geweest in het daadwerkelijk veranderen van de status quo. Met andere woorden, nog altijd is de landsgrens einde plangebied. De grens blijkt weerbarstig. Een eerste doel van deze studie is dan ook om antwoord te geven op de vraag: waarom is de grensoverschrijdende r.o. onvoldoende in staat (gebleken) tot het verwezenlijken van een grensoverschrijdende, functionele ruimte?

Wetenschappelijke perspectief

Om te analyseren op welke wijze de grens invloed uitoefent op de ruimtelijke ordening, hoe zij de r.o. op allerhande wijzen 'begrenst', is in deze studie gekozen voor een wetenschappelijke benadering gebaseerd op het nemen van een stap naar een hoger abstractieniveau. In plaats van het reconstrueren van de ervaringen van de deelnemers aan grensoverschrijdende r.o. om aldus te komen tot een narratief

Appendices

over de specifieke casus, bijvoorbeeld de Nederlands-Duitse grens tussen 1990 en nu, wordt in deze studie een theorie ontwikkeld waarin algemene patronen worden blootgelegd als het gaat om hoe ideeën van 'regio', 'integratie' en 'planning' botsen dan wel interacteren met de fysieke én sociale werkelijkheid waarnaar zij verwijzen en waarop zij aanspraken doen. In dat krachtenveld dient de rol van 'de grens' nader uitgewerkt te worden. Omdat er geen kant-en-klare theorie voor handen is, waarin onze 'empirische horizon' (de met elkaar in verband staande fenomenen 'grens', 'regio', 'planning' en 'integratie') gethematiseerd worden, is het tweede en voornaamste doel van deze studie dan ook het zelf ontwikkelen van deze theorie. Hiervoor wordt voortgebouwd op reeds bestaande theorieën.

Systeemtheorie

De voornaamste onderlegger voor deze studie is de systeemtheorie van Niklas Luhmann (1927-1998), die een universele theorie van de maatschappij ontwierp. Volgens Luhmann is de maatschappij een sociaal systeem dat bestaat uit communicatie. Het sociale systeem is bovendien gedifferentiëerd in allerlei subsystemen. Ik volg zijn these dat de huidige maatschappij bestaat uit 'functionele' sociale systemen, oftewel communicatiesystemen met ieder hun eigen maatschappelijke functie. Denk hierbij aan economie, politiek, wetenschap en meer. Daar bovenop zijn er nog twee andere typen sociale systemen, te weten 'organisaties' en 'ontmoetingen'. Alle sociale systemen ontlenen hun eenheid aan zelf-referentie, dat wil zeggen dat hun communicaties altijd volgen op eerdere communicaties; sociale systemen bestaan dus eerder in de tijd dan in de ruimte. Omdat een sociaal systeem, en dus 'de maatschappij', bestaat uit communicatie, bestaat zij niet uit mensen; een belangrijk analytisch onderscheid. Ook is het goed om te benadrukken dat we niet kunnen spreken over de maatschappij van een land, in de zin van 'de Nederlandse samenleving'. De maatschappij is globaal en de interne grenzen van dit systeem zijn functioneel van aard en niet geografisch. De in deze alinea kort uitgelegde basisprincipes zijn bepalend voor hoe een theorie van grensoverschrijdende ruimtelijke ordening eruit kan zien.

Als gevolg van de keuze voor systeemtheorie, is deze studie gepositioneerd in een constructivistische benadering van sociale wetenschap; zij gaat uit van een werkelijkheid die sociaal wordt geconstrueerd. Daarnaast houdt onze positie in dat we kiezen voor een amorele wetenschap, oftewel het bewust achterwege laten van afwegingen over wat goed of fout, rechtvaardig of onrechtvaardig is en het doel om de maatschappij, inclusief planning, te verbeteren. In mijn onderzoek wil ik slechts de wetenschap, dat wil zeggen reflecties over wat waar is en niet waar, verbeteren. Hierin wijkt deze studie af van de 'kritische' school van grensonderzoek en van dominante discoursen in het planningonderzoek, die bijvoorbeeld een meer rechtvaardige samenleving of r.o. nastreven. In de eerste twee hoofdstukken alsmede in de conclusie van dit boek wordt daar uitgebreid op ingegaan.

Hoe dit boek in elkaar zit

De kern van dit boek wordt gevormd door vier hoofdstukken die eerder zijn gepubliceerd als artikelen in wetenschappelijke tijdschriften. Het eerste daarvan gaat over de ontwikkelingsgeschiedenis van het bedrijventerrein Avantis op de grens tussen Heerlen (NL) en Aachen (DE), waarmee ik een beeld wil tonen van de praktijk van grensoverschrijdende r.o. De drie daaropvolgende hoofdstukken betreffen alle een deel van de theorieontwikkeling; het zijn als het ware de bouwstenen van mijn theorie. In het laatste hoofdstuk (conclusie) tracht ik deze bouwstenen samen te brengen tot een systeemtheorie van ruimtelijke planning en reflecteer ik met behulp van die theorie op mogelijkheden en onmogelijkheden van een grensoverschrijdende r.o. Ik zal deze gedeelten hieronder stap voor stap samenvatten.

Appendices

Uitdovende EUforie langs de Nederlands-Duitse grens

In hoofdstuk 3 wordt een case study gepresenteerd van het gefaalde grensoverschrijdende bedrijventerrein Avantis. Hierin schetsen we een geschiedenis van plannen, contacten, investeringen en ontwikkelingen in de Europese context, zodat we een beeld krijgen van de praktijk van grensoverschrijdende r.o., de motieven en de resultaten. Behalve de verklaringen die deelnemers zelf geven voor de moeizame totstandkoming van het bedrijventerrein, is er volgens onze analyse nog een andere verklaring, namelijk de 'EUforie' van de vroege jaren '90, volgend op de val van de Berlijnse Muur, waarin men een grenzeloos Europa voor zich zag. Dit genereerde de nodige middelen voor het aangaan van experimenten op het gebied van grensoverschrijdende r.o. en integratie. Deze EUforie versluierde de hardnekkige werkelijkheid van een grens die wel degelijk veel belemmeringen oplegde aan wat er juridisch mogelijk was en in hoeverre bedrijven Avantis daadwerkelijk een aantrekkelijke vestigingslocatie vonden. Het hoofdstuk eindigt met de paradox van grensoverschrijdende r.o., namelijk dat men een grens nodig heeft om grensoverschrijdend te kunnen samenwerken, waarmee men die grens, in een poging om deze uit te wissen, tegelijkertijd bevestigt.

Empirische grenzen uitgelegd

Hoofdstuk 4 gaat niet expliciet over ruimtelijke planning, maar kijkt naar de wezenlijke dimensie van 'de grens', die we benaderen vanuit het perspectief van systeemtheorie waaraan we een stukje theorie toevoegen om de invloed van grenzen als fysieke/landschappelijke elementen te begrijpen. Ten eerste beweren we dat de fysieke werkelijkheid niet objectief gekend kan worden, maar dat deze altijd afhankelijk is van wie (of wat) deze werkelijkheid observeert. Op dat niveau, het niveau van communicatie en observatie, worden grenzen 'geconstrueerd'. Er is echter geen garantie dat de

observaties van de fysieke werkelijkheid 'kloppen', dat wil zeggen dat het natuurgetrouwe weergaven zijn van de fysieke werkelijkheid en dus succesvolle aanpassingen van systeem en omgeving. Het observeren is altijd selectief en impliceert blinde vlekken. Zo weten we bijvoorbeeld dat territoriale grenzen dikwijls recht door economische, religieuze of familie-netwerken heensnijden.

Uitgaande van een werkelijkheid van sociale systemen, moeten we onderscheid maken tussen de grenzen van de sociale systemen en de grenzen die door sociale systemen worden geconstrueerd. De eerste categorie kan niet in de ruimte bestaan, noch kan zij gelijk worden gesteld aan de grenzen tussen groepen mensen. De grenzen van sociale systemen bestaan namelijk alleen als communicatieve selectie en zijn onzichtbaar voor het sociale systeem zelf. De tweede categorie betreft constructies van het systeem, de (opzettelijke) categoriseringen die een systeem maakt om zich te kunnen verhouden tot de wereld. Deze grenzen kunnen alleen in het systeem bestaan en kunnen slechts indirect ge-externaliseerd worden doordat ze bijvoorbeeld de cognitie beïnvloeden en daardoor aanzetten tot fysieke handeling. Niettemin moeten we alsnog een onderscheid maken tussen het 'grensconcept' van het systeem en het eventuele fysieke resultaat daarvan in het landschap.

Elke grens komt voort uit een onderscheid dat door een systeem gemaakt wordt. Op theoretisch niveau is er dan ook geen verschil tussen bijvoorbeeld 'mensen' en 'regio's'. Een dergelijk onderscheid dient eerst gemaakt te worden en dit kunnen we vervolgens (tweede orde observatie) observeren. Dit is dan ook het enige waar we 'objectief' zeker van kunnen zijn, dat het onderscheid gemaakt wordt. Het onderscheid dat we vervolgens in hoofdstuk 4 gemaakt hebben tussen sociale, ruimtelijke en conceptuele grenzen kan dan ook niet op ontologisch niveau begrepen worden. Sterker, sociale grenzen, zoals het onderscheid tussen ethnische of culturele groepen, zijn ook conceptuele grenzen. Ze ontstaan als gevolg van een systeem dat dit concept hanteert. Met de term

'empirische grens' duiden we vervolgens op het fenomeen dat de karakteristieken van de fysieke ruimte wel degelijk impact kunnen hebben op de maatschappij, maar dat deze impact pas geduid kan worden wanneer sociale systemen deze conceptualiseren. De empirische grens is dus een 'pre-sociale grens' welke bovendien een veelheid aan betekenissen kan verkrijgen.

Euregionalisme als zelf-organiserend systeem

In hoofdstuk 5 hebben we de concepten uit het vorige hoofdstuk verder toegepast en verfijnd door in te gaan op het fenomeen 'regio' en 'regionalisme'. We definiëren regionalisme grofweg als de constructie en het onderhoud van een 'regioconcept', door sociale systemen, dat zij projecteren op de fysieke ruimte. In deze definitie is de term 'regio' dus niet voorbehouden aan fenomenen die zichzelf regio noemen, zoals Euroregio's, maar het kan ook gaan over indianenreservaten, nationale parken of wijnregio's. Het zijn allemaal ruimtelijke concepten voor zover ze verwijzen naar een deel van de fysieke ruimte en niet naar het geheel. En als ruimtelijke concepten impliceren ze ruimtelijke grenzen. Men kan zich voorstellen dat sommige van deze grenzen 'vager' zijn dan andere, die preciezer omschreven zijn en daardoor vaak ook meer impact hebben in onze levens. In dit hoofdstuk ontwikkelen we, met andere woorden, een theoretisch begrip over waarom sommige regio's (en hun grenzen) meer betekenis en impact hebben, sterker 'geïnstitutionaliseerd' zijn, dan andere.

We bekijken de institutionalisering van regio's door een systeemtheoretische lens en geven dit een andere definitie, namelijk als de zelf-organisatie van een systeem door middel van de productie van 'structuren' als gevolg van zijn zelf-productie (autopoiese). Om dit visueler te maken, stellen we dit proces voor als de constructie van een netwerk, vergelijkbaar met het 'actor-netwerken' van Bruno Latour,

waarbij heterogene elementen, inclusief conceptuele elementen als een bepaalde regio, met elkaar in relatie worden gebracht. Voor de duidelijkheid, met 'het produceren van structuren' verwijzen we niet naar het fysieke resultaat van dit proces, maar naar de 'betekenisstructuren', oftewel selecties van de relaties tussen de elementen. Elke (communicatieve) operatie van het systeem veronderstelt een selectie en de herhaling van die selectie zorgt er uiteindelijk voor dat hij structurele waarde verkrijgt. Ruimteliike planning maakt het noodzakelijk regioconcepten te linken aan politiek en wet en/of aan de economie. Het kan die andere sferen echter niet direct beïnvloeden, maar het moet die zien te irriteren en op die manier aanzetten tot het aangaan van die links (structurele koppeling). Gezien vanuit de systeemtheorie is zelforganisatie daartoe de enige mogelijkheid.

Op dit punt hebben we de semiotiek van Charles Sanders Peirce geïntroduceerd, welke een theorie over observatie omvat. Een 'teken', bijvoorbeeld de 'Euregio', verwijst niet in absolute zin naar een gebied dat zich uitstrekt aan weerszijden van een staatsgrens. Waar het naar verwijst is afhankelijk van de observeerder, welke noodzakelijkerwijs observeert vanuit de eigen onderscheiden en dus anders dan een andere observeerder. Hoewel deze theorie begrijpelijk wordt als we onder observeerder individuele mensen verstaan, duiden we in ons verhaal op het (zelforganiserende) systeem als observeerder. De betekenisstructuren eigen aan specifieke systemen bepalen de manier waarop een teken kan worden geïnterpreteerd. Planningorganisaties zien de Euregio bijvoorbeeld als territorium voor ruimtelijke planvorming, terwijl economische organisaties (bedrijven) de Euregio zien als een mogelijke bron van subsidies. Kortom, hoewel communicatie lijkt te verwijzen naar hetzelfde gebied op de kaart, impliceert een teken vele verschillende betekenissen, afhankelijk van de systeemreferentie.

Een belangrijke conclusie die in dit hoofdstuk getrokken wordt, is dat de systemen die zich bedienen van 'Euregionalisme' er niet in slagen om een politieke gemeenschap te mobiliseren. Zij teren weliswaar op publieke gelden, maar creëren discoursen, beelden, plannen en verhalen die als het ware in het luchtledige hangen. Bij gebrek aan een eigen 'demos' rest hen nog de mogelijkheid organisaties te irriteren die meer ingebed zijn in het politieke systeem en het recht, maar in de Nederlands-Duitse casus slagen ze daar onvoldoende in.

Ruimtelijke planning in grensoverschrijdende regio's

In het zesde hoofdstuk worden de inzichten uit de vorige hoofdstukken samengebracht met de theorie van de wereldmaatschappij. Om in te zoomen op ruimtelijke planning, is het noodzakelijk de 'organisatie' te conceptualiseren als een specifiek type sociaal systeem dat in verhouding staat tot de maatschappelijke context. In navolging van Niels Andersen gebruik ik de term 'polyfonie' om aan te geven dat organisaties, naast dat ze besluiten nemen met betrekking tot hun empirische object, de codes van verschillende maatschappelijke functiesystemen verwerken. De mate waarin de organisatie slaagt in het verwerken van die verschillende maatschappelijke perspectieven, bepaalt voor een groot deel in hoeverre ze haar doelen bereikt. Planningorganisaties worden in deze theorie dus in hun (globale) maatschappelijke context geplaatst. We kunnen nu nader omschrijven hoe planning eruit ziet en hoe het werkt vanuit het perspectief van een systeemtheorie van ruimtelijke planning.

Ondanks de populaire term 'planningsysteem', veelal verwijzend naar nationale tradities van ruimtelijke ordening, kan er geen sprake zijn van één systeem dat zich met de ruimtelijke ordening bezighoudt. In mijn perspectief bestaat ruimtelijke planning uit tijdelijke configuraties van organisaties (sociale systemen) gericht op landgebruik, die dobberen op een zee van andere organisaties, vervlochten met de functionele

differentiatie van de wereldmaatschappij. We kunnen deze genestelde situatie van de ruimtelijke planning ook bezien als de inbedding ('embedding') van een 'assemblage' - die eerder genoemde tijdelijke configuratie van organisaties- maar het gaat er juist om hoe de individuele systemen doorlopend (co-) evolueren. De verschillende organisaties in een assemblage zijn structureel gekoppeld. Dat betekent dat ze middels zelf-organisatie structuren produceren waarmee ze elkaar kunnen observeren. Wat ik planningassemblage noem, vrij naar Gilles Deleuze, is een alternatief voor de term 'planningsysteem', die niet opgaat omdat er zeer veel verschillende systemen in betrokken zijn. In de analyse richten we ons vooral op de organisaties, die in hun operaties polyfonisch de functiesystemen verwerken. Het beeld van het assemblage als een heterogene, altijd bewegelijke, veranderlijke constellatie is illustratief.

Hoewel politiek ook een (globaal) functiesysteem is, is dit (noodzakelijkerwijs) regionaal gedifferentiëerd. Veel planningorganisaties als subsystemen van het politieke systeem worden door deze regionale differentiatie gecontextualiseerd, hetgeen ruimtelijke planning zeer afhankelijk maakt van territoriale grenzen alsmede van het juridische systeem, dat dezelfde territoriale grenzen hanteert. Dankzij de regionale differentiatie van politiek en recht is het mogelijk geweest dat ruimtelijke planning een zekere mate van complexiteit heeft ontwikkeld. De organisaties van ruimtelijke planning ontstaan niet uit het niets, maar kennen een padafhankelijke evolutie, waarin ze hun besluiten uit het verleden meedragen naar het nu, maar ook hun afhankelijkheid van de evolutie van andere sociale systemen ('interdependence'). De relatieve stabiliteit die voortkomt uit regionale differentiatie, oftewel de wereld van de natiestaten, zorgt voor een ruimtelijke planning met relatief grote interne complexiteit, hetgeen tegelijkertijd inhoudt dat er veel verborgen aannames zijn en een grote mate van vanzelfsprekendheid over het bestaan ervan.

Ruimtelijke planning heeft een empirisch object dat het wil 'sturen'; de beslissingen in planningorganisaties richten zich op sturing. Echter, als gevolg van hun operationele geslotenheid —ze bestaan immers uit zelfreferentiële communicatie—hebben zij geen directe toegang tot de fysieke ruimte of tot enige menselijke actoren die transformaties in die ruimte zouden moeten bewerkstelligen. Planningorganisaties zijn alleen in staat zichzelf te sturen, waarbij ze de zelfperceptie hanteren dat zij de inrichting van de ruimte sturen en waarbij ze bedoelde en onbedoelde uitkomsten hiervan observeren, aan de hand waarvan ze zich 'recalibreren' door middel van nieuwe beslissingen. Daarbij zijn ze opnieuw beperkt door pad- en inter-afhankelijkheid.

Het verwijzen naar de fysieke omgeving, dat zo essentiëel is voor planningorganisaties, wordt meestal gemediëerd door ruimtelijke concepten, met name regioconcepten. De herhaling van dergelijke concepten draagt bij aan relatief stabiele structuren, die het mogelijk maken om meer interne complexiteit op te bouwen. Dat kan wetgeving zijn, maar ook onbedoelde politieke besluiten of economisch belang et cetera. Ruimtelijke concepten spelen een sleutelrol in hoe organisaties structureel gekoppeld zijn met andere organisaties. Bijvoorbeeld, verschillende planningorganisaties spelen verschillende rollen rondom een bepaalde regio, maar door steeds te verwijzen naar deze regio, sensibiliseren ('sensitize') ze elkaar; ze zullen de noodzaak tot respons evalueren en, alleen al daardoor, co-evolueren.

Niet alleen ruimtelijke planning kan complexer worden met behulp van territoriale grenzen. Stabiele grenzen maken namelijk een toename van interne complexiteit mogelijk simpelweg omdat verschillende subsystemen van politiek en recht een structurele koppeling met elkaar kunnen aangaan waarbij de grenzen als gemeenschappelijke referentiepunten dienen. Daarbij moet opgemerkt worden dat complexiteit in beginsel samenvalt met 'wereld', ofwel de wereld als ongemarkeerde ruimte, die fundamenteel complex en dynamisch is voordat er sprake is van enig sociaal systeem.

De synthese van een sociaal systeem behelst de operatie van het maken van een onderscheid vis-à-vis deze wereld. waarmee het tegelijkertijd de complexiteit van die wereld nu zijn omgeving-reduceert alsmede de interne complexiteit van het systeem vergroot. Vervolgens kunnen sociale systemen, en daarmee het overkoepelende sociaal systeem 'maatschappij', steeds complexere vormen van differentiatie bereiken. Het resultaat is inderdaad dat de wereld complexer schijnt te worden, maar enkel als gevolg van een toegenomen interne complexiteit waardoor de maatschappij meer perspectieven heeft om die wereld te observeren. Als we kijken naar het wetenschappelijk debat over complexiteit in planning, zou ik willen suggereren dat complexiteit al veel langer van belang is voor planning, namelijk in haar pogingen om de complexiteit te reduceren –een paradox– zodat het mogelijk wordt om de fysieke ruimte, ruimtelijke patronen en processen te kunnen sturen.

Het belang van grenzen —zowel de operationele grenzen van planningorganisaties en andere sociale systemen als de grenzen die zij met behulp van ruimtelijke concepten projecteren in de fysieke ruimte— wordt vermoedelijk onderschat in planningonderzoek, vooral in hun rol als complexiteit-reducerende elementen. Ze zijn zo vanzelfsprekend dat aan hun conditionerende invloed makkelijk voorbij wordt gegaan. Dat geldt ook voor de grensoverschrijdende r.o.-praktijk. Immers, wordt er in de context van de nationale planningstraditie al geklaagd over de complexiteit van de hedendaagse maatschappij, wanneer men twee van dergelijke tradities wil integreren is er in feite sprake van een dubbele complexiteit.

Conclusie

Grensoverschrijdende r.o. aan de Nederlands-Duitse grens, na de EUforische hoogtijdagen van de jaren '90, behoudt een bescheiden karakter. Tegelijkertijd blijft de interesse vanuit

de wetenschap bestaan en ook in de praktijk, bij publieke instanties langs de grens, blijft er hoop bestaan dat grensoverschrijdende r.o. een grotere rol kan spelen in het stimuleren van integratie en functionele, economisch relevante uitwisseling over de grens heen. Vanuit die achtergrond wordt dan ook gepleit voor meer middelen en meer bewustzijn en betrokkenheid. Mijn systeemtheoretische analyse wijst echter op structurele condities die een grensoverschrijdende r.o. onwaarschijnlijk maken, want structureel gehinderd in haar perspectief op effectiviteit. Hiermee doel ik op de regionale differentiatie van de sociale functiesystemen politiek en recht, in weerwil van een wereldmaatschappij die als geheel functioneel en niet regionaal gedifferentiëerd is. Politiek en recht zijn 'slechts' subsystemen, maar zolang deze hun regionale differentiatie onderhouden, en daarmee de voorwaarde voor de opbouw van een grotere interne complexiteit, hoeven we niet al te grote verwachtingen te hebben van een grensoverschrijdende r.o.

In de conclusie van deze studie heb ik tevens benoemd dat hoe meer sectoren van landgebruik berokken worden in de grensoverschrijdende r.o. —hoe integraler de opzet— hoe moeilijker het wordt om resultaten in de fysieke ruimte te bewerkstelligen vanwege de dubbele complexiteit. Op kleinere, eenduidige terreinen, zoals recreatie of natuurontwikkeling, is eenvoudiger een vruchtbare samenwerking te ontwikkelen, maar vaak met een tijdelijk karakter. Ook heb ik nog een andere belemmering willen benoemen, te weten het hiërarchische zelfbeeld dat planningorganisaties hanteren, waarin politiek en beleid geschaald worden, met de Europese Unie als hoogste niveau, gemeenten als laagste niveau en grensregio's daar ergens tussenin. Dit wekt te veel verwachting van de EU en verhindert een realistisch beeld van de werkelijk relevante (planning-) organisaties.

Tot slot: met behulp van het ontwikkelen van een theoretisch kader, gebaseerd op systeemtheorie en aangevuld met ideeën uit andere theorieën, heb ik gepoogd nieuwe inzichten te krijgen over grensoverschrijdende r.o. langs de Nederlands-Duitse grens. Dit heeft geleid tot een sociologie van ruimtelijke

Appendix 1: Samenvatting (summary in dutch)

planning, bestaande uit een variatie van theoretische inzichten, die ook bruikbaar zijn buiten deze casus. Zo heb ik nieuwe concepten ontwikkeld voor het begrijpen van fenomenen als 'grens', 'regio' en 'integratie', die op logische wijze met elkaar samenhangen in het theoretisch kader. Ook in andere case studies kan van dit kader gebruik worden gemaakt. De theorie is niet 'af' en de dialoog met de relevante disciplines 'ruimtelijke planning' en 'grensonderzoek' kan op basis van dit boek verder verdiept worden.

Fading EUphoria at the Dutch-German border

The paper deals with the failure of the Avantis cross-border business estate. The inception of this hitherto largely undeveloped site took place in the early 1990s, a period which we suggest characterising with the notion of EUphoria, that is, a widely held belief in the future of a borderless Europe. EUphoria is seen as the key to bringing together otherwise separate discourses under one shared ambition of constructing a cross-border business estate. With the fading of EUphoria, however, Avantis resurfaces as a shared problem and appears to have been built on expectations and promises held within a discourse of European integration rather than among private investors. In retrospect, Avantis as a product of EUphoria remains a EUtopia, albeit with very few believers.

Jacobs, J. & H.J. Kooij 2013. Fading EUphoria at the Dutch-German Border: the Case of AVANTIS. *Tijdschrift voor Economische en Sociale Geografie* 104(3): 379-387.

Understanding empirical boundaries

The aim of this contribution is to present a conceptual framework with potential application across the inter-disciplinary field of border studies. This framework should embrace interdisciplinarity and the contextual nature of borders. Based on the systems theory of Niklas Luhmann, it elaborates an understanding of borders as being related to a dynamic process of social bordering/bounding processes that involves spatial, social, and conceptual boundaries. By introducing the notion of 'empirical boundary', our framework aspires to bridge the gap between (radical) constructivist theorising and the analysis of physical realities involved in the (re)production of boundaries.

Jacobs, J. & K.A.M. Van Assche 2014. Understanding Empirical Boundaries: A Systems-Theoretical Avenue in Border Studies. *Geopolitics* 19 (1): 182–205.

Euregionalism as self-organizing system

Studies of cross-border regions in the European Union have struggled conceptually with an apparent ambiguity of Euregionalism: namely that cross-border regions seem to be the manifestations of reterritorialising state governance on the one hand, but have clearly failed to substantially challenge the Westphalian state territorial system on the other. The aim of the present paper is to develop a conceptual framework that helps us understand this paradoxical nature of crossborder regions. To this end, we draw on the systems theory of Niklas Luhmann and the semiotics of Charles Sanders Peirce, and propose to regard Euregionalism (and regionalisms more generally) as a self-organising system. Self-organisation entails the process in which self-referential communication, rather than a set of actors, employs spatial concepts, such as the region, to enable system-specific entanglements with physical space, either short-lived or enduring, and possibly -but not necessarily- involving governance.

Jacobs, J. & K. Varró 2014. Rethinking Cross-Border Euregionalism as a Self-Organizing System. *Space and Polity* 18 (1): 1–16.

Spatial planning in cross-border regions

Most scholarship in spatial planning presupposes an established institutional setting, where a specific legal framework is in place, one is accustomed to certain procedures and routines, and planning has a certain (national) history. In cross-border regions, however, this becomes problematic as different institutional settings clash. Combining systems and organizational theory, this article constructs a theoretical perspective on planning, explicitly conceptualizing differences, that is, boundaries, in institutional settings. This sheds new light on the prospects and realities of spatial planning across national borders. National borders double the complexity of spatial planning, and organizations working in cross-border spatial planning need to take this into account by acknowledging their own and others' organizational boundaries as well.

Jacobs, J. 2016. Spatial Planning in Cross-Border Regions: A Systems-Theoretical Perspective. Planning Theory 15 (1): 68–90.

Appendix 3: list of interviews

AHL = Anna-Lena Hoh HJK = Henk-Jan Kooij JJ = Joren Jacobs KV = Krisztina Varró

a.	2009/05/15 Ronald de Jong Gemeente Maastricht	JJ
b.	2009/06/26 Thomas Clemens & Lars Vervoort Stellwerk	JJ
c.	2009/07/16 Hans Van Hoof De Lijn	JJ
d.	2012/02/03 Theo Alsters & Aad Blokland Provincie Limburg	KV/JJ
e.	2010/02/03 Eric Gruisen Gemeente Maastricht	KV/JJ
f.	2010/02/09 Simone van der Steen	KV
g.	2010/03/10 Marcel Tabbers Haringwurst	JJ
h.	2010/04/23 Elsbeth Raedts Gemeente Heerlen	KV/JJ
i.	2010/04/23 Volmar Delheij Parkstad Limburg	KV/JJ
j.	2010/05/31 Andreas Dorn Avantis N.V.	HJK/JJ
k.	2010/11/17 Bas Peusens Provincie Limburg	HJK/JJ
1.	2010/11/17 René Seijben Avantis N.V.	HJK/JJ
m.	2011/02/08 Stefan Kupers Provincie Limburg	KV/JJ
n.	2011/02/08 Ton Kleijnen Provincie Limburg	KV/JJ
o.	2011/03/09 Dietmar Kottmann Stadt Aachen	HJK/JJ
p.	2011/03/15 Nermin Dizdarevic Parkstad Limburg	KV/JJ
q.	2011/03/15 Ruth Roelen tädteregion Aachen	KV/JJ
r.	2011/03/28 Floris MoolhuijsenProvincie Limburg	HJK
s.	2011/03/28 Rob van Midden LIOF	HJK
t.	2011/04/06 Helmut Breuer RWTH Aachen	HJK/JJ
u.	2011/04/27 Rijk Hammer LIOF	HJK/JJ
v.	2011/05/03 Projectgroep Albertknoop	KV/JJ
w.	2011/06/10 Ferdi Heynen	ALH
х.	2011/06/14 Guido Roelofs	ALH
y.	2011/06/17 Friedrich Foerster	ALH/JJ
z.	2011/06/20 Ad Knotter Universiteit van Maastricht	KV
aa.	2011/06/20 Dorothee van den Bosch	KV
ab.	2011/06/20 Georg Maes & Stephan Haupt	ALH
ac.	2011/06/24 Jürgen Franken	ALH
ad.	2011/06/30 Cor Hartogs Stadsregio Arnhem-Nijm.	ALH/JJ
ae.	2011/07/01 Wilco Veldhorst	ALH
af.	2011/07/06 Andreas Mayer Burgerinitiatief	ALH/JJ
ag.	2011/07/06 Frank van Maarseveen VROM	KV
ah	. 2012/03/15 Stephanie Dühr Radboud Universiteit	KV/JJ
ai.	2012/03/20 Johann Körfer Stadt Aachen	KV/JJ
aj.	2012/03/20 Arthur Hansen Regio Aachen	KV/JJ
ak.	2012/06/13 Rose-Marie Eissen Provincie Gelderland	JJ
al.	2012/06/21 Wolfram Günther Stadt Aachen	KV/JJ

ao. 2012/07/31 Brigitte De Deyne Ville de Liège ap. 2012/10/29 Laurent Brück & Annemarie Veithen Ville de Liège aq. 2012/10/29 Björn Koopmans Euregio Maas-Rijn ar. 2013/05/03 Marijn van Ginderen Provincie Limburg as. 2013/07/25 Martijn van Os & Cor Hartogs Stadsregio Arnhem-Nijm. KV BY STATION OF STATION	am. 2012/06/21 Andrea Trebschuh Initiativ Aachen	KV/JJ
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aq. 2012/10/29 Björn Koopmans Euregio Maas-Rijn ar. 2013/05/03 Marijn van Ginderen Provincie Limburg as. 2013/07/25 Martijn van Os & Cor Hartogs Stadsregio Arnhem-Nijm. KV as. 2013/07/25 Martijn van Os & Cor Hartogs Stadsregio	ao. 2012/07/31 Brigitte De Deyne Ville de Liège	KV/JJ
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as. 2013/07/25 Martijn van Os & Cor Hartogs Stadsregio Arnhem-Nijm. JJ	aq.2012/10/29 Björn Koopmans Euregio Maas-Rijn	KV/JJ
Arnhem-Nijm. JJ	ar. 2013/05/03 Marijn van Ginderen Provincie Limburg	KV/JJ
,	as. 2013/07/25 Martijn van Os & Cor Hartogs Stadsregio	
at. 2013/08/14 Marcel Walraven VIEV	Arnhem-Nijm.	IJ
	at. 2013/08/14 Marcel Walraven VIEV	JJ

Appendix 4: list of relevant publications

- Jacobs, J. 2016. Spatial Planning in Cross-Border Regions: A Systems-Theoretical Perspective. Planning Theory 15 (1): 68–90.
- Jacobs, J. & K. Varró 2014. Rethinking Cross-Border Euregionalism as a Self-Organizing System. *Space and Polity* 18 (1): 1–16.
- Jacobs, J. & K.A.M. Van Assche 2014. Understanding Empirical Boundaries: A Systems-Theoretical Avenue in Border Studies. *Geopolitics* 19 (1): 182–205.
- van Houtum, H., G. van der Bruggen, J. Jacobs & M. van der Giessen 2013. The borders of cross-border policy: The end of the plan. In Eker, M. en H. van Houtum (red.) *Borderland: Atlas, essays and design History and future of the border landscape*, pp. 138-149.
- van Houtum, H., G. van der Bruggen, J. Jacobs & M. van der Giessen 2013. De grenzen van het grensoverschrijdende beleid: einde plangebied. In Eker, M. en H. van Houtum (red.) *Grensland: Atlas, essays en ontwerp Geschiedenis en toekomst van het grenslandschap*, pp. 144-155.
- Jacobs, J. & H.J. Kooij 2013. Fading EUphoria at the Dutch-German Border: the Case of AVANTIS. *Tijdschrift voor Economische en Sociale Geografie* 104(3): 379-387.
- Jacobs, J. 2012. Borderscape als ruimtelijk ontwerp. AGORA: Magazine voor sociaalruimtelijke vraagstukken 28(4): 9-13.
- Van Assche, K.A.M., R. Beunen, J. Jacobs & P. Teampău 2011. Crossing Trails in the Marshes: Rigidity and Flexibility in the Governance of the Danube Delta. *Journal of Environmental Planning and Management* 54(8): 997-1018.
- Jacobs, J. 2010. Hoe planning als wetenschappelijke discipline de boot mist: analyse van een verdeeld vakgebied. *TOPOS: Periodiek over land-schapsarchitectuur, ruimtelijke planning en sociaal-ruimtelijke analyse* 20(3): 16-19.
- Jacobs, J. 2010. Planning aan de Grens: Houdt het daar op of gaat het daar verder? TOPOS: Periodiek voor landschapsarchitectuur, ruimtelijke planning en sociaal-ruimtelijke analyse 20(Lustrum): 64-67.

Conference papers and presentations

- Jacobs, J. 2013. Understanding Cross-Border Spatial Planning. *Presentation given at Alexander von Humboldt Research Seminar*, 23 October, Radboud University, Nijmegen.
- Jacobs, J. 2013. Pieces of a Theory of Second-Order Observation in Border Studies. *Presentation given at Alexander von Humboldt Research Seminar*, 2 October, Radboud University, Nijmegen.
- Jacobs, J. 2013. Tussen EUtopie en Werkelijkheid: de paradox van grensoverschrijdende ruimtelijke planning. *Presentation given at GrensEvent*, 14 June, Lillo.

- Kooij, H.J. & J. Jacobs 2011. Spatial Planning at the Border: The Case of Campus Europa. *Paper presented at the Autumn School Nederland-Duitsland-studies*, 11 October, Münster.
- Jacobs, J. & K. Varró 2011. The 'reterritorialization' of governance in the Dutch borderlands: a view from assemblage theory. Paper presented at the Border Regions in Transition XIth Conference, 6-9 September, Genève and Grenoble.
- Jacobs, J. 2010. Spatial Planning in Cross-Border Areas: Transforming the border by working with Things. *Paper presented at the Regional Studies Association Annual Conference*, 24-26 May, Pécs.
- Jacobs, J. 2010. Transnationalism in Practice: Exploring the conditions for a new spatial planning across the Dutch border. *Paper presented at the Norface final seminar*, 29-30 March, Egham.
- Jacobs, J. 2009. How to measure the scope for transnationalism in cross-border spatial planning practice? *Paper presented at GaP Seminar*, 13 November, Radboud University, Nijmegen.

Other

Atelier Landscape Architecture and Planning "Planning and Designing the Heerlen-Aachen Borderscape", Wageningen University, September – December 2010.

Appendix 5: professional resume

Curriculum Vitae/ Professional resume

Aike Joren Jacobs, born September 21, 1982, in Heerenveen, the Netherlands

2025 - present	Supervisor for BSc theses at the department of Geography, Planning, and Environment at Radboud University Nijmegen.
2024 - present	Owner/enterpreneur of Wijn vd Natuur, online wine sales.
2024 - 2025	Teacher of i.c.t. at Stichtse Vrije School (high school) in Zeist.
2014 - 2025	Co-owner of Nieuw Mos (organic supermarket) in Amersfoort.
2014 - 2024	Enterpreneur and manager at Nieuw Mos (organic super-market), Amersfoort.
2009 - 2013	PhD Candidate and junior research fellow at the department of Geography, Planning and Environment. Radboud University Nijmegen.
1998 - 2013	Employee at Natuurwinkel Amersfoort (currently "Nieuw Mos").
2008 - 2010	Freelance editor and writer at Blauwdruk publisher in Wageningen.
2004 - 2008	Master Landscape Architecture and Planning, with a minor in Philosophy and Planning, at Wageningen University.
2006	Visiting scholar at Saint Cloud State University, Minnesota, studying spatial planning in American-Indian Reservations.
2001 - 2006	Bachelor Landschap, Planning en Ontwerp.
2005	Student assistant at the department of Social-Spatial Analysis, Wageningen University.

Cross-border spatial planning in world society

a systems-theoretical perspective

Joren Jacobs

Borders play a central role in practices of spatial planning. Usually, this requires no explicit conceptualization because of long-established governance arrangements which take their borders for granted. However, in cross-border areas, such as along/across the Dutch-German border, they necessarily become the prime focus. Many times, planners have tried to overcome the state border and steer towards transboundary spatial development... Without much success. But why is this so?

This book explores a novel avenue in understanding the challenges of cross-border spatial planning from a transdisciplinary, sociological perspective. Combining Niklas Luhmann's theory of self-referential social systems – and his thesis of world society – with various other theoretical ideas on borders, regions, and planning, it provides a second-order observation of the phenomenon, producing insights on how boundaries limit and enable spatial planning; insights which are normally hidden to the profession.

"Why public officials in border areas are drawn to cross-border solutions remains an intriguing question. This is possible only by hiding the paradox of cross-border spatial planning, namely that for cross-border spatial planning to take place, borders are needed, and for it to be effective, it has to work with these borders, thereby reproducing them rather than helping to eradicate them."



